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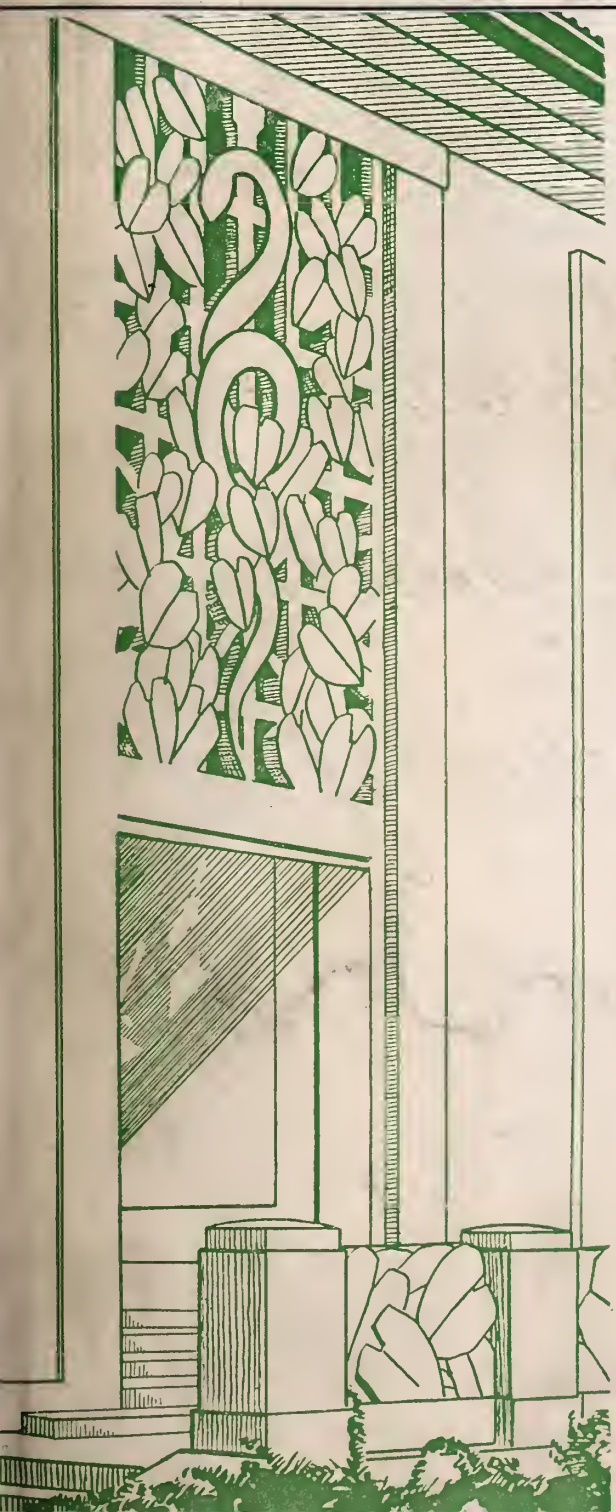
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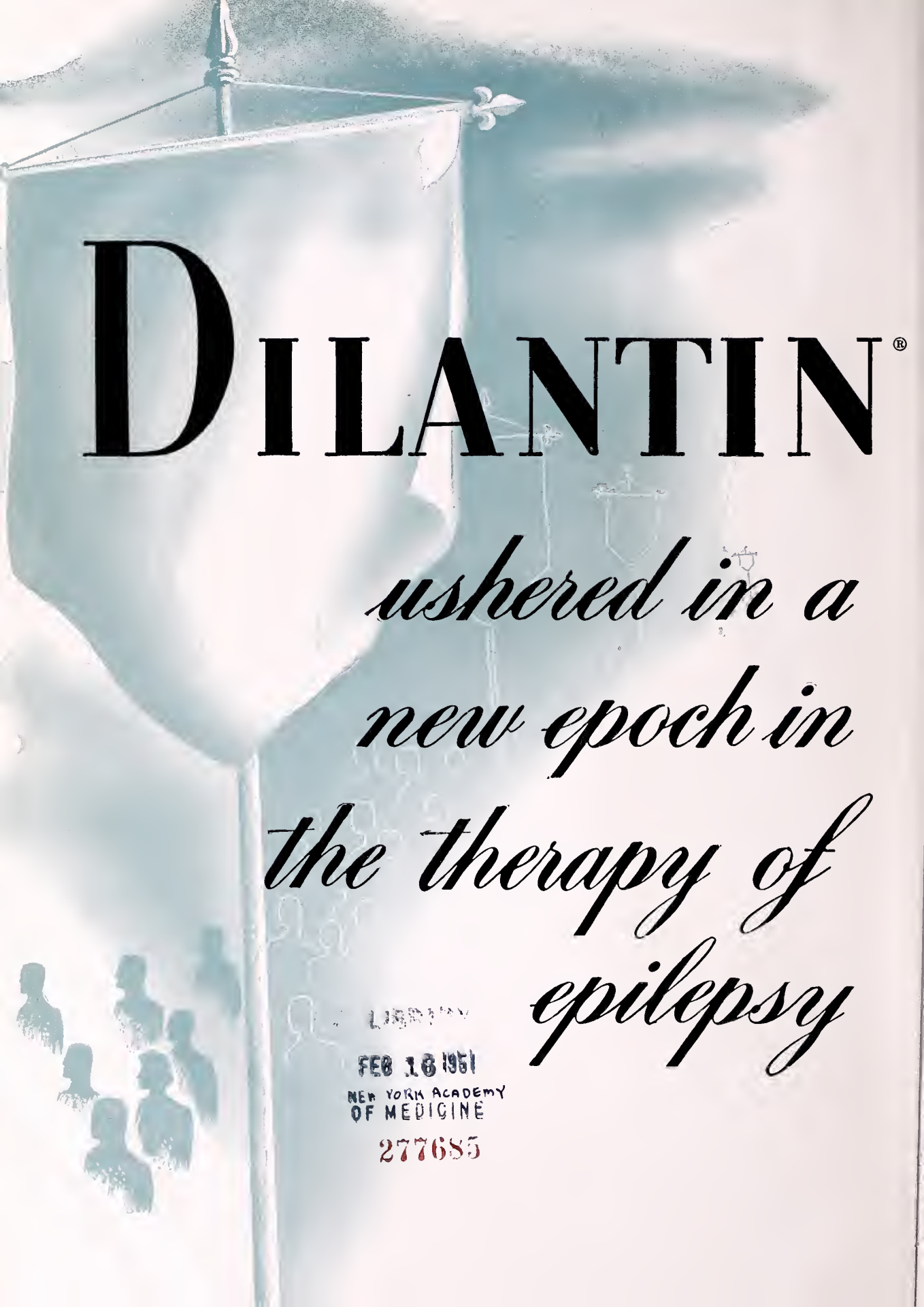
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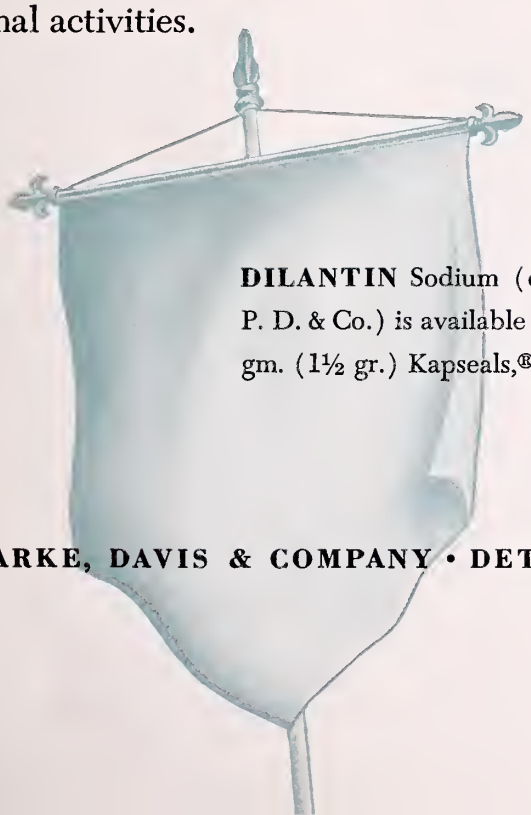
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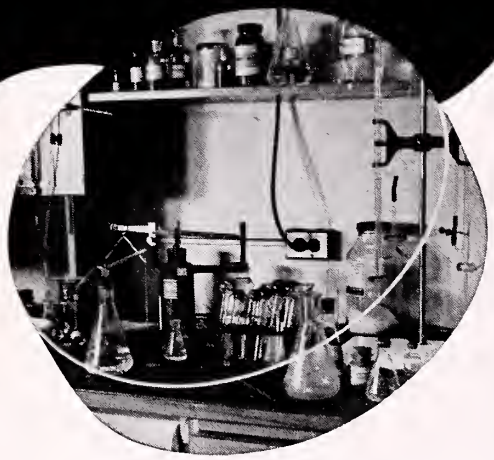
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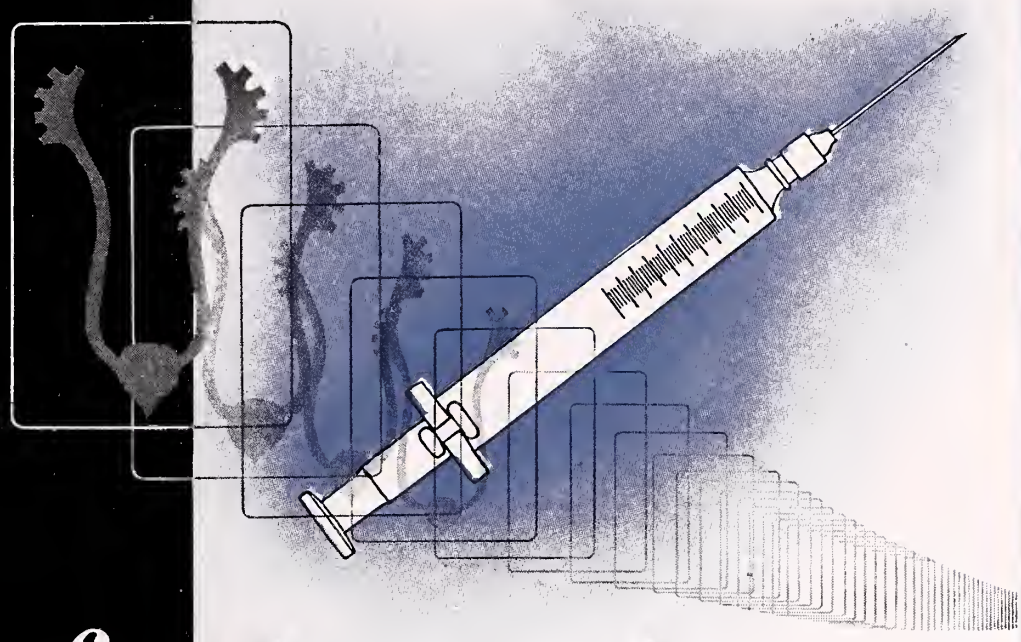
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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32-241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.



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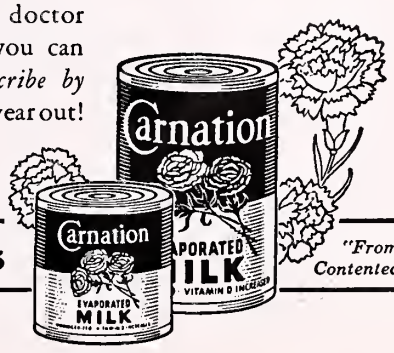
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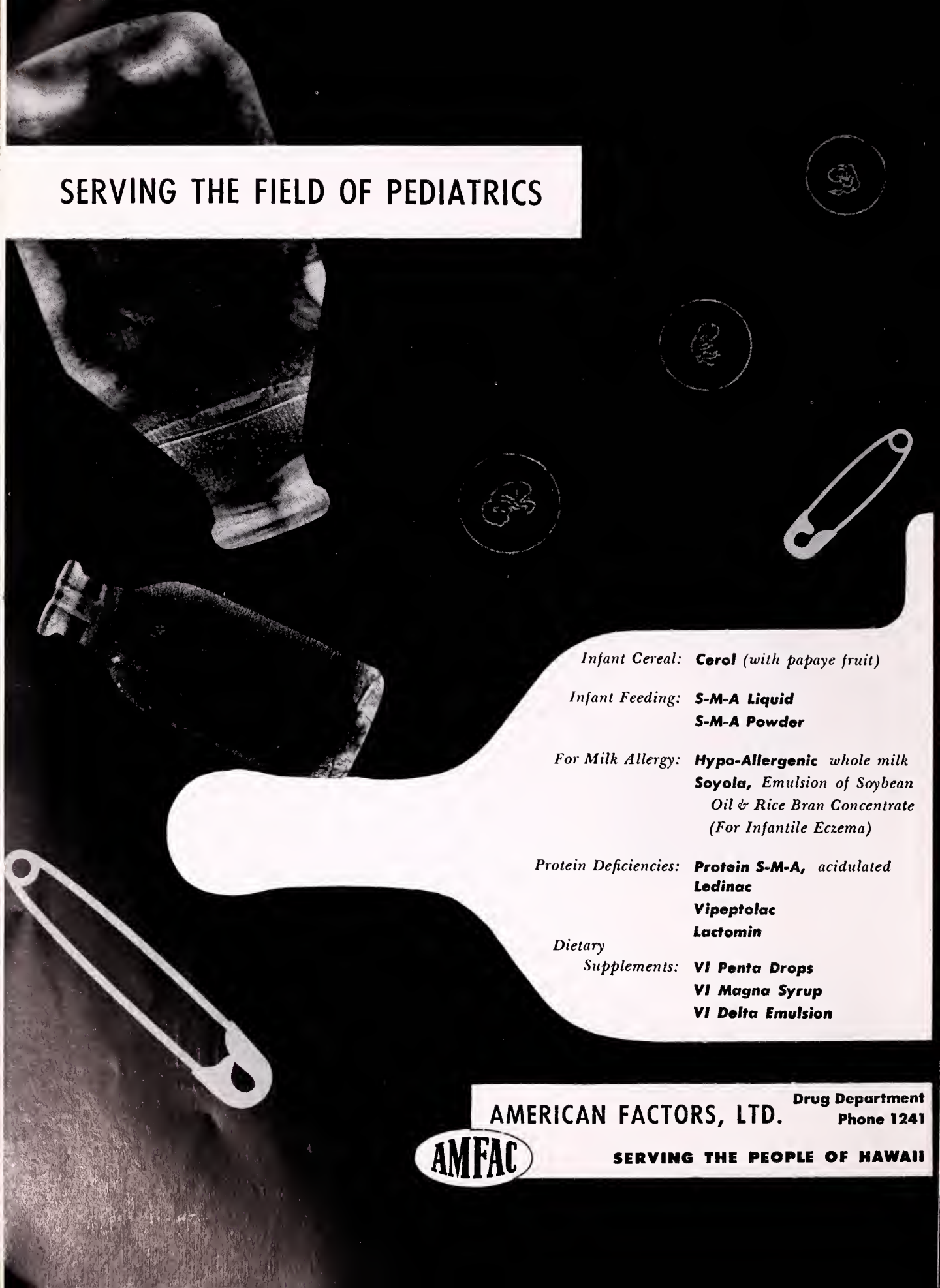
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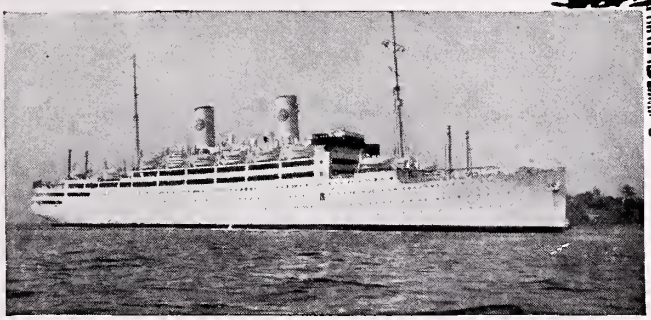
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SAMUEL C. HARVEY, M. D.*

TO ATTEMPT to lay before you a comprehensive survey of the more recent work in the experimental and clinical fields of neoplastic disease, would be indeed an ambitious undertaking and one far beyond my own knowledge and the time available. I shall, instead, try to summarize what has been done, point out some interesting deductions that may be made, and venture some predictions for the future.

In fact, it is scarcely necessary to do more than this, for comprehensive reviews of the newer work in the field of "cancer" § are provided for in the reports of the proceedings of the Fourth International Cancer Research Congress held in St. Louis last September and summarized by Cowdry [1] in the *Journal of the American Medical Association* of December 20, 1947, and of a recent meeting of the American Association for Cancer Research held in Atlantic City,[2] the proceedings of which will be available shortly. There have been also within the last few years reviews by Rous,[3] Spencer,[4] and Leo Loeb,[5] having to do with the more fundamental problems and by Craver,[6] Stout,[7] Coley,[8] Haagensen,[9] Maier,[10] Stewart,[11] and Cannon,[12] concerning its clinical manifestations. There is a similar but more condensed consideration of recent advances by Grantley Taylor.[13] These are quite aside from other reviews devoted to certain restricted areas by Nathanson, concerning the "Endocrine Aspects of Cancer" [14], and of "Benign Breast Disease" [15] by Parson and Meigs [16] in gynecology, and Huggins on "Androgen and Anaplasia" [17]. There is indeed no dearth of literature, only a lack of time to become familiar with it, as I have found out in trying to live up to my recently tagged job of Coordinator of Oncology in the Yale School of Medicine.

Part of the difficulty of attempting to summarize all this work lies in the fact that many of the fundamental advances have been made in the laboratories of the so-called "Preclinical Sciences," with knowledge and techniques with which the clinician is not familiar and which have not, therefore, been brought to bear upon "cancer" in man. In part, also, this is because these at the moment have but little relationship to the care of the patient with "cancer," and the clinician has to carry on with what means he already has at hand. Nevertheless, advances in clinical medicine and surgery have been in the past, in large part, dependent upon an understanding of the "fundamentals" as they have been developed in the laboratory rather than upon empiric methods of trial and error with the patient, surprisingly successful at times, it is true, but also uncertain and ephemeral. It is important, therefore, to keep in mind that in "cancer" at least, the validity of the concepts originating in the laboratory must finally be tested by the clinician, for it is "cancer" in man that makes this work of great importance.

Causes of "Cancer"

It is becoming clear from the experimental work that "cancer" is a disease of many origins having in common only its characteristic manifestation of disorganized and uncontrolled growth, a vital distinction but one that is as yet not well understood. In what fashion is this cell or its environment so changed that it has gone "berserk," that it is no longer inhibited in its growth and controlled so as to fit into the pattern of normal growth or regeneration?

* Professor of Surgery (Oncology), Yale University School of Medicine, New Haven, Connecticut. Supported by a grant in aid from the National Cancer Institute of the National Institute of Health, U. S. Public Health Service. Read before a meeting of the Hawaii Territorial Medical Association, May 8, 1948.

§ The quotation marks are the author's, here and throughout.

[1] Cowdry, E. V.: The Fourth International Cancer Research Congress, J.A.M.A. 135:1067 (Dec. 20) 1947.

[2] Proceedings of the American Association for Cancer Research, March, 1948, at Atlantic City, in press. To appear in Cancer Research.

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[16] Parsons, L. and Meigs, J. V.: Gynecology: Carcinoma of the Vulva, New Eng. J. Med. 234:860 (June 27) 1946.

[17] Huggins, C.: Androgen and Anaplasia, Yale J. Biol. & Med. 19:319 (Jan.) 1947.

Carcinogenic Agents

The discovery of coal tar carcinogens by Yamagiwa and Ishikawa [18] as long ago as 1915 and the subsequent isolation and identification of these by Kennaway and Cook[19] aroused the greatest expectation that "the cause" of "cancer" had been found. Though failing in this, these were in fact an epochal contribution, well deserving of the Nobel Prize, and served to activate experimental work tremendously. Not only did those having a chemical interest respond to this stimulation, but when it became understood that certain of the hormones, notably those associated with sex differentiation, the estrogens and androgens, were closely allied to these anthracenes, numerous investigators having to do with hormones became involved. Lacassagne,[20] and Allen and Gardner [21] showed that these hormones were in a sense carcinogenic. The male of a strain of mice in which carcinoma of the breast occurred spontaneously in a high order of frequency in the female, when given estrogen thus producing a marked growth of this organ—a feminization of it—developed carcinoma as did the female of the strain. This might be considered as a somewhat vicarious form of carcinogenesis, but it served at least to make the point that under the terms of the experiment the development of "cancer" was dependent upon a hormone, a normal and physiological product of the organism. Furthermore, in the female mouse, when given in large doses over a considerable length of time, it produced hyperplasia of the epithelium of the uterus and breast, in some instances indistinguishable from carcinoma, and occasionally enough for demonstration purposes. The production of metastases proved this growth was truly a malignant one.

This group of chemical agents, so closely allied, have been intensively investigated by Haddow [22] and his collaborators in England and many "carcinogens" made and studied. In fact, it has been found that there are many potential carcinogens elaborated in the course of the normal economy of the body which are obviously not effective save under highly specialized conditions fortunately not obtaining in man, so far as is known at the present time!

Going still further away from the original coal-tar carcinogens, certain cholesterol relatives, cholic acid, "butter yellow," the "nitrogen mustards" and even so relatively simple a chemical substance as urethane, have been found to be carcinogenic under certain conditions.

Preferential Sites

It has always been realized that similar requirements are necessary for the development of "cancer" in man. Certain types of neoplasms occur in certain organs and spread within certain limitations, so that the picture in a given instance is a characteristic one making up the natural history of the disease. In other animals this has been shown to be true between species, for transplantation can be done, as shown by Greene,[23] from man into the eye of the rabbit or guinea pig, but under specific conditions having reference to the tumor in question and to the host. A striking example is that of the Brown-Pierce tumor in the mouse which metastasizes spontaneously in the ovaries and adrenals, but not elsewhere. It is possible to transplant this heterologously, by first introducing a fragment of adrenal into the anterior chamber of the host and then the tumor; under these circumstances it grows. Another interesting example demonstrated in the laboratory of specific conditions necessary to neoplasia is that of the production of granulosa cell tumors which metastasize in the mouse. Li and Gardner [24] have shown that when either male or female mice are castrated and an ovarian graft made in the spleen, the transplanted tissue develops into a malignant new growth. This is dependent upon the ability of the liver to inactivate ovarian hormones when they circulate through the portal system, and then the increase of pituitary gonadotropins subsequent to castration stimulates the ovary to the formation of a granulosa-cell tumor. This is, then, another hormone, arising in the pituitary, which, under certain conditions, is carcinogenic.

Heredity

Another conditioning factor is that of heredity, which is not clearly apparent in man possibly because of his non-selective breeding habits. In mice, a great number of strains have been developed, some highly susceptible to the spontaneous occurrence of "cancer" and some highly resistant, which now breed true with great consistency, and it is for this reason that so much of the experimental work is carried on in these animals. There can be no question that heredity

[18] Yamagiwa and Ishikawa: Pathogenesis of Carcinoma, J. Cancer Res. 3:1 (Jan.) 1918.

[19] Kennaway, E. L. and Cook, J. W.: Chemical Compounds as Carcinogenic Agents; Second Supplementary Report: Literature of 1938 and 1939, Am. J. Cancer 39:381 (July), 39:521 (Aug.) 1940.

[20] Lacassagne, A.: Relationship of Hormones and Mammary Adenocarcinoma in Mouse, Am. J. Cancer 37:414 (Nov.) 1939.

[21] Allen, E. and Gardner, W. U.: Cancer of Cervix of Uterus in Hybrid Mice Following Long-Continued Administration of Estrogen, Cancer Res. 1:359 (May) 1941.

[22] Haddow, A.: Mode of Action of Chemical Carcinogens, Brit. Med. Bull. 4:331, 1947. Boyland, E.: Chemical Carcinogenesis and Experimental Chemotherapy of Cancer, Yale J. Biol. & Med. 20:321 (March) 1948. Hirschboeck, J.; Lindert, M. C. F.; Chase, J.; and Calvy, T. L.: Effects of Urethane, J.A.M.A. 136:90 (Jan. 10) 1948.

[23] Greene, H. S. N. and Lund, P. K.: The Heterologous Transplantation of Human Cancer, Cancer Res. 4:352 (June) 1944.

[24] Li, M. H. and Gardner, W. U.: Granulosa Cell Tumors in Intrapancreatic Ovarian Grafts in Castrated Mice, Science 106:270 (Sept. 19) 1947.

is another conditioning factor in carcinogenesis, though not "the cause" as some of its most enthusiastic exponents hold. A most important development in this field is provided by the experiments of Strong,[25] which are of great significance in "cancer" as well as in the fundamental field of biology. To put it briefly, he has found that by using one of the more potent anthracene carcinogens which readily produces "cancer" in the mouse, not only does neoplasia occur in the immediate animal, but continues to occur in succeeding generations long after there is any possibility of the persistence of the carcinogen, and that this in certain instances is linked with other changes such as color of the hair. This indicates that a mutation has been produced by a chemical agent giving a positive heredity for "cancer."

Viral Agents

Another group of experimenters, beginning with Rous in 1911,[26] have been investigating viral agents as the cause of "cancer," these being peculiarly effective in the fowl, but also producing leukemia in the mouse and the papilloma of Shope in the rabbit. There has been some hesitancy in recognizing these as being of significance in relation to "cancer," but recent work of Bittner [27] with the "milk factor" seems to bring them definitely into this field. During certain cross-breeding experiments in mice, "cancer" occurred in the progeny in a way that was unexpected and which could not be explained on the basis of heredity. This suggested the transfer of some extra-chromosomal agent. In the course of an extensive exploration of the possible factors, it was found that mice of a high "cancer" strain nursed by foster mothers of a low "cancer" strain had a low incidence of mammary "cancer" and conversely, that mice of a low "cancer" strain nursed by foster mothers of a high "cancer" strain had a high incidence of mammary "cancer." This agent transmitted in the milk corresponds, on analysis of its characteristics, to a virus. Again then, multiple factors are concerned in carcinogenesis, in this instance genetic susceptibility, normal hormonal stimulation, and an agent which is presumably viral in nature.

The Dividing Cell

This all seems more confusing than clarifying and has largely been of the nature of the accumulation of what seems to be disjointed information from which, as yet, a significant correlative synthesis has not been made. Yet one may, I think, with some benefit point out some things that fit together. One of these is that the carcinogenic agent, whatever it may be, has to do with the actively dividing cell. The evidence for this is on the whole indirect but cumulative. As shown by Greene,[28] it is not possible to transplant, heterologously, fully differentiated adult cells; on the other hand, embryonic tissue can be so transplanted as well as "malignant tumors." Similarly, significant is the transplantation of "tumors" actively growing into the embryo in the chick.[29] Moreover, "cancer" in man occurs in frequency in direct ratio to the presence of normally dividing cells. Instances of this are the epithelial cells of the skin and the gastro-intestinal tract, the uterus and the breast which are periodically or constantly subjected to stimulation with division and multiplication. The hematopoietic system, as in the bone marrow, is likewise constantly productive of new cells. Moreover, there is a clinical impression that injury, which of course normally leads to a regenerative response by multiplication of pertinent cells, has some relationship to "cancer." This has been confirmed by experimental work which indicates that the response to injury facilitates the action of carcinogenic agents. All this leads, in my opinion, away from the thesis of the origin of "cancer" by a process of "metaplasia" or "dedifferentiation" of adult cells, back to that of relatively undifferentiated cells normally persisting and active in the embryo and throughout adult life. These normally divide, differentiate and undergo organization as in the embryo, but with the carcinogenic injury, become disorganized, fail to differentiate fully or in part, and continue to multiply, so forming an abnormal growth.

This thesis has the merit of concentrating one's attention upon the persisting "stem cell," whether it be epithelial, hematocytic, lymphocytic or histiocytic, and more specifically upon the period of its life when it is undergoing division.

Investigation of the dividing cell is being carried on in the laboratory by the cytologist using the more recent techniques developed by the physicists and chemists. The various components of the cell are being separated by the "ultracentrifuge" and studied. The enzyme systems of the cell are under intensive investigation also, and the changes within it, and between it and its immediate environment, followed by the use of tracer isotopes, radio-active and otherwise.

What, then, can the clinician contribute to all

[25] Strong, L. C.: Observations on Genetic Nature of Gastric Cancer, Surg., Gynec. & Obst. 84:727 (April) 1947.

[26] Rous, P.: op. cit.[3]

[27] Bittner, J. J.: Possible Method of Transmission of Susceptibility to Breast Cancer in Mice, Am. J. Cancer 39:104 (May) 1940.

[28] Greene, H. S. N. and Lund, P. K.: op. cit.[23]

[29] Lee, H. F.; Bender, D. H.; and Friedgood, C. E.: Heterologous Tumor Transplantation by Intravenous Inoculation of the Chick Embryo, Science 107:374 (Apr. 9) 1948.

this? At the moment not much, I am afraid, save a sympathetic understanding and a readiness to be of assistance. But as the fundamental knowledge of "cancer" is expanded and amplified, as it will be, I am sure, in the next few years, he and the patient will certainly benefit in ways that are impossible to foretell, but which he should be alert to recognize and apply.

Diagnosis of "Cancer"

The advances in the field of "cancer" in man are, in part, derived from the experimental work and in part from clinical experience. In the latter, the essential basis of correct therapy is, of course, diagnosis, and it is this that should be first discussed. Little of importance has been added in recent years to the taxonomy or classification of tumors. In certain instances it would seem that the sharp delimitation within groups is not of the significance formerly assumed. In the lymphomata, over a period of time or indeed in multiple biopsies at the same time, a strict interpretation would imply that the patient is suffering from a multiplicity of diseases, where common sense tells one that these are manifestations of one form of malignancy which presents a varying histological picture. There should be an understanding on the part of the clinician that while the categorical imperative of the pathologist is the mainstay of diagnosis in malignancy, he also is human and that the physician or the surgeon cannot absolve himself of the responsibility of evaluating all the findings, historical and physical, and of making the working diagnosis, upon which his decision, as regards treatment, rests. It is salutary to the clinician and the pathologist alike, and necessary for accurate statistical reporting, that in all cases of long survivals, 3 years, 5 years and 10 years, the sections be gotten out again and restudied. It will be found then, not infrequently, that the original diagnosis was open to suspicion or was incorrect, rather than that a brilliant therapeutic result had been obtained. There seems to be an increasing recognition, which is subject to further improvement, of greater rigorousness of selection of data and of statistical analysis in the clinical reports in the literature.

This is also expressed by the insistence upon adequate biopsy before therapy wherever this can be done, both for the welfare of the patient and for the accurate appraisal of results. Not only does this apply to easily accessible lesions on the surface of the body, but with the increasing use of endoscopy, a majority of the new growths of the upper respiratory passages, of the bronchi, of the esophagus, of the urinary bladder and of the rectum and colon, are accessible for this purpose.

Cytological Diagnosis

In the past two or three years, the method of cytological diagnosis of Papanicolaou, about which there had previously been considerable skepticism, has acquired relative validity. His findings in "cancer" of the uterus have been now confirmed, notably by Meigs and Graham [30] and by Ayre,[31] as well as by many others, and have been found a mainstay in the argument for "detection clinics" about which I shall have more to say when discussing "Cancer Control."

At this moment, I think all who have had experience with this technique of diagnosis will agree that its value is not that of an absolute diagnosis but of an "alert" or danger signal, which demands an intensive investigation from every angle, including biopsy and frequently multiple biopsy. It of course never should be taken to prove that the patient does not have cancer at the moment or that she will not be liable to it in the future. There is a grave danger, if it is reduced to a simple laboratory procedure with a nurse and a scraper on one end of the production line and a cytologist on the other, that more harm than good will be done. It does not obviate in any way an adequate history and direct examination by a skilled clinician, who must take the responsibility for whatever decision is made. This cytological approach to a diagnosis is being extended with considerable promise of success to the bronchi, to the prostate and urinary tract, and to the stomach. Sufficient data are not yet available to make as accurate an evaluation of this as of the case in "cancer" of the uterus.

Other Aids

Additional aids in diagnosis may in the near future become available through study that is in the initial stages, with radioactive isotopes as tracer elements. Normally functioning or hyperfunctioning thyroid tissue can be identified anywhere in the body by the injection of Iodine 131 and following it with the Geiger counter. This is even now of value, limited by the fact that the majority of the tumors of the thyroid are functionless and therefore do not act as depots of iodine. However, the principle is sound, and as knowledge of chemical aberrations peculiar to tumors develops, it well may be that similar isotopes of other elements will be of use in diagnosis and possibly in treatment.

[30] Meigs, J. V. *et al:* Value of Vaginal Smear in Diagnosis of Uterine Cancer; Report of 1015 Cases, Surg., Obst. & Gynec. 81:337 (Oct.) 1945. Meigs, J. V.: Vaginal Smear: Practical Applications in Diagnosis of Cancer of Uterus, J.A.M.A. 133:75 (Jan. 11) 1947.

[31] Ayre, J. E.: Selective Cytology Smear for Diagnosis of Cancer, Am. J. Obst. & Gynec. 53:609 (Apr.) 1947.

There are scattered instances of chemical changes that are diagnostic of specific tumors, for instance the positive Aschheim-Zondek test in the presence of chorio-epithelioma and the analogous testicular tumors. The excretion of the 17-ketosteroids in the urine, which is being so extensively investigated at the Memorial Hospital in New York, may prove to be of value, but as yet there is nothing at hand applicable to routine practice and the procedures are expensive and time-consuming.

The enzymatic systems are under investigation under the stimulus of Huggins' [17] discovery of the importance of acid phosphatase in prostatic "cancer," and of its variation with hormonal therapy. Even now a significant elevation of the alkaline phosphatase may be indicative of extensive malignant disease of the bone, although it occurs also in several other disorders having nothing to do with neoplasia. One group of investigators is studying hyaluronidase [32] and a suggestive correlation with "cancer" has been found, while in our own laboratories Clark [33] has found a similar relationship with antifibrinolysin. All of these potential tests, even if they prove to be of value, will in no instance be pathognomonic, but may be of service as "screening tests" to alert the examiner to the necessity for further investigation.

Lastly, the heterologous transplantation of "cancer" as carried out by Greene,[23] when applied to those arising in man, while not assisting in the immediate diagnosis and treatment, may serve in some instances to clarify the degree of malignancy and the type of cell involved.

Treatment of "Cancer"

In turning to the advances in the treatment of "cancer" there have been no world-shaking contributions; in the same sense that there is "no cause," generically speaking, there is "no treatment" specific for neoplasm in general. Here, too, it must be considered from the viewpoint of a large number of varieties, many having little in common save that they all kill the patient by an uncontrolled and disorganized growth.

Palliation

The ideal objective is, of course, "cure" and in the past to a considerable degree this has resulted in ambitious but futile attempts, by reason of which the patient has been subjected to unnecessary procedures involving physical and mental distress and economic disaster. Rarely has palliation been discussed or properly employed. There seems to be developing at the present time a greater consideration of what can be done to the patient who presumptively cannot be cured. Daland [34] has written on palliation and there are being set up at the Massachusetts General Hospital certain beds for "terminal care" with a view to this, both for investigation and for teaching purposes. Along a similar vein is the attempt of Brunschwig [35] to obtain palliation, not cure, by massive abdominal operative procedures, and Haagensen and Stout,[36] in a detailed follow-up study of "cancer" of the breast, have attempted to define those situations in which there is a reasonable expectation of a "cure," as distinct from those in which this is so remote that palliation becomes the objective of the treatment. I believe this trend to be intelligent and significant.

The first question that the clinician should ask himself in any given patient with malignant disease is: Just what are the chances of obtaining a cure, not on the basis of statistical probabalities in general, but with the conditions that obtain in the patient? In many instances, unfortunately, he is forced to the conclusion that only a miracle, the incidence of which is strikingly low in cancer, will result in a "cure." Then he should cease to think in these terms and try to determine what he can do in the way of palliation, taking into consideration the natural history of the disease as seen in this patient, the possible means of prolonging life with the minimum of suffering, as well as the familial and economic factors present. This is not, as it might seem, a counsel of despair, but rather, under the circumstances, one of trying to make the best of a bad situation, and of not saying to the patient or the family, as has been done too often in the past, that "he has an inoperable 'cancer' from which he is going to die and" that "there is nothing that can be done about it," or worse still to put him through an unnecessary operative procedure with additional distress to everyone concerned and discredit to surgery.

The discussion of this particular topic may seem inordinately lengthy, but it has some bearing upon what is to follow, for such advances as have been made recently are more along the lines of palliation than "cure." True it is that radical resection of the lung, of the esophagus, of the stomach and of the pancreas are being done with greater facility of technique both in the procedure itself and in the postoperative and preoperative care, with an increase of operability and a highly creditable decrease of operative mor-

[32] Anlyan, A. J.: Work as yet unpublished.

[33] Work as yet unpublished.

[34] Daland, E. M.: Palliative Treatment of the Patient with Advanced Cancer, J.A.M.A. 136:391 (Feb. 7) 1948.

[35] Brunschwig, A.: Radical Surgery in Advanced Abdominal Cancer, University of Chicago Press, Chicago, 1947.

[36] Haagensen, C. D. and Stout, A. P.: Carcinoma of Breast; Criteria of Operability, Ann. Surg. 118:1032 (Dec.) 1943.

tality. This and the details by which it has been accomplished are familiar to all of you and available in a copious literature, but I wish to point out that were "cure" the only benefit to be obtained from such procedures, the return on the investment would be so low that even the most hardy surgeon might be lacking in enthusiasm. At the best there is a hope of "cure" until exploration has been carried out, and then, if this is not possible, palliation, which in itself justifies the further procedures. The hope for future progress, for the most part, in so far as we can see, lies in earlier diagnosis, and short of this an important part of our therapy will be palliative.

Surgery vs. Radiation

It is commonly said that the treatment of "cancer" is either surgery or radiation, or a combination of the two. This, to a degree, still remains true, but one senses in the literature of the past few years that the zones of effectiveness of the two are becoming more clearly defined; at least this is true in our own clinic.

Epithelioma of the lower lip and of the cervix uteri still remain in most quarters primarily reserved for roentgen therapy, and, where the growth is confined to the primary site, the results are excellent. However, when there has been a spread to the draining lymph nodes, there is increasing doubt as to the efficiency of radiation, particularly in respect to "cure," as indeed there should be likewise in surgery. In both instances systemic spread or distant metastases are the exception rather than the rule and the patient usually succumbs to the complications caused by the local growth. In the neck, there is still no consensus as to the prophylactic removal of lymph nodes, but the trend in the hands of those having the greater experience seems to be toward more radical one-stage procedures, where the initial lesion and the nodes are removed in one sitting. Sugarbaker [37] and Hayes Martin [38] advocate this in "cancer" of the buccal cavity and under the present resources as regards anesthesia and proper care for the patient before and after the operation, the mortality of the procedure has become, in their hands, reasonably low. It is a question whether or not the ultimate number of patients "cured" will be increased, but it seems probable that death is appreciably delayed and palpable palliation achieved. However, until the final results are in hand it would be well for most of us to continue to use radiation for the primary lesion, and if it responds, then radical resection of the draining lymph nodes, if palpable, or when they become so.

In carcinoma of the cervix uteri there is somewhat the same questioning of the accuracy of the present, well-established methods of treatment by radiation. There has been a revival of the "Wertheim operation" in certain quarters, notably by Meigs,[39] but in a much more radical and complete fashion than was the case in the original procedure or in its use subsequently. Again, with the present day anesthesia and care of the patient, this can be done by competent hands with a very low mortality, but it has not yet been proved that the results obtained by radiation will be improved, and they certainly will not if it is attempted by those unfamiliar with the procedure and unaccustomed to such extensive and formidable surgery. Short of this, extra-peritoneal removal of the draining lymph nodes along the iliac vessels, as advocated by Parsons,[40] is perhaps chiefly of interest in giving information as to the frequency of this involvement; certainly if it is common, then the argument for the comprehensive radical hysterectomy is materially strengthened.

In the "frozen pelvis," the usual result of progressive carcinoma of the uterus, Brunschwig is removing en masse the contents of the pelvis, including the rectum and bladder, with transplantation of the ureters into the colon, above a colostomy. Again this is only possible because of the improvements in the care of the patient and in anesthesia. Sufficient time has not elapsed, nor adequate experience been acquired, to evaluate the palliation afforded by this, for certainly the prospect of "cure" under such conditions would be exceedingly remote. This massive procedure is, of course, an extension of a similar form of attack upon "cancer" elsewhere in the abdomen. A close analysis of the case reports in Brunschwig's [35] monograph indicates that the longer time survivals, where valuable palliation is more apparent, were instances of growth with slow progression. Sometimes the history suggests this, or the natural history of the type with which one is dealing; and then, if death from incidental complications (such as hemorrhage or obstruction) is avoided without basically changing the pace of the growth, worthwhile palliation is obtained. This approach makes such massive surgery in certain instances rational, while with the rapidly progressive growth which will terminate

[37] Sugarbaker, E. D. and Gilford, J.: Combined Jaw Resection Neck Dissection for Metastatic Carcinoma of Cervical Lymph Nodes, Surg., Gynec. & Obst. 83:767 (Dec.) 1946.

[38] Martin, H. E.; Munster, H.; and Sugarbaker, E. D.: Cancer of Tongue, Arch. Surg. 41:888 (Oct.) 1940. Martin, H. E.: Treatment of Cervical Metastatic Cancer, Ann. Surg. 114:972 (Dec.) 1941.

[39] Meigs, J. V.: Wertheim Operation for Carcinoma of Cervix, Am. J. Obst. & Gynec. 49:542 (Apr.) 1945.

[40] Parsons, L. and Meigs, J. V.: op. cit.[16]

the situation in a few months, it is neither logical nor humane.

Hormones

The use of hormones in the treatment of "cancer" is familiar to all of us from the pioneer work of Huggins in "cancer" of the prostate, where castration and the use of estrogens have been so successful from the palliative standpoint. It has occurred to many that the situation might be somewhat analogous in "cancer" of the breast. In fact, castration of the female was introduced as long ago as 1896 by Beatson [41] in England for this, and has been done sporadically since then. At present it is being used (more on a theoretical basis than with any supporting statistical evidence) in many clinics, including our own, where there is involvement of the lymph nodes draining the breast, and when the patient is still menstruating. It must be kept in mind, however, that the lowering of estrogen by this procedure may be only relative and that even masculinization by the use of androgen does not completely remove the female hormone from the picture.

The effectiveness of oophorectomy being at least not proven, one is tempted in desperation to use in addition or in lieu of it estrogen or androgen, though there is little reason to suppose that such medication would be of value. Indeed, theoretically, sex hormones are carcinogenic, though probably not in the relatively small doses employed in man. It is better, however, not to do this until more information is obtained as to any action they may have upon "cancer" in man. Studies to this point have been made notably by Nathanson [42] and by Adair [43] and their collaborators using patients with recurrent and incurable carcinoma of the breast. Recently a committee of the National Research Council has been set up to carry out an extensive clinical investigation in several clinics along these lines. The general use of these agents should be delayed until further information has been obtained.

At the moment, Nathanson, using diethylstilbestrol in relatively large doses in patients with advanced disease, has observed in an appreciable number of instances marked and favorable changes in visible recurrences and in metastases to bone as seen in the roentgenogram. In breast carcinoma in the male, a relatively rare but almost incurable lesion at the time it is usually seen, this treatment seems to be of very considerable value. It should be emphasized that these results, even when most marked, are only palliative but nevertheless important. At the moment, this treatment in the female should be used only after the menopause is well passed, or above 60 years of age, and when recurrences are of a nature that do not permit effective radiation or adequate surgical measures. Certainly, it should not be used in a prophylactic sense, for there is a definite possibility that occasionally it may not only be ineffective but actually harmful.

Adair has used testosterone for this purpose more vigorously and in a greater number of instances than has any other investigator. Theoretically, this in contrast to the estrogen can be employed at any age, but it has in the doses employed in many patients a masculinization effect, which in the younger group, at least, is frequently distressing. The results on the whole correspond to those obtained with the estrogens. It has the disadvantage of having to be given parentally, and is very expensive. The same limitations in its uses should be observed as are indicated with diethylstilbestrol. Our own experience in a limited number of instances confirms the observations of Nathanson and Adair.

Other Compounds

Other chemical compounds, without too much reason, have been found to have palliative values in certain forms of neoplasia. These will be touched upon briefly. As a rule they are potentially toxic to a high degree and must be used with complete control and extraordinary care. One of these with which considerable experience has been had, first in our own clinic by Lindskog, subsequently in larger numbers elsewhere, is the "nitrogen mustards." Extensive reports on this have been made by Gilman and Goodman,[44] who first investigated its peculiar properties having to do with a specific action on the hematopoietic system and therefore upon malignant disease arising from it. Other reports by Jacobson [45] and by Rhoads [46] give an extensive and adequate review of the situation down to a recent date. Its use should be limited to those instances where neither surgery nor radiation is effective, or when recurrence has occurred which is no longer responsive to these therapies. It is most effective in Hodgkin's disease and less so in other forms of

[41] Beatson, G. T.: On the Treatment of Inoperable Cases of Carcinoma of the Mamma: Suggestions for a New Method of Treatment, Lancet 2:104, 1896.

[42] Nathanson, I. T.: op. cit.[14] Herrmann, J. B.; Adair, F. E.; and Woodard, H. Q.: Effect of Estrogenic Hormone on Advanced Carcinoma of the Female Breast, Arch. Surg. 54:1 (Jan.) 1947.

[43] Adair, F. E.: Use of Male Sex Hormone in Women with Breast Cancer, Surg. Obst. & Gynec. 84:719 (Apr.) 1947.

[44] Goodman, L. S. *et al:* Nitrogen Mustard Therapy; Use of Methyl-bis (B-chloroethyl) amine hydrochloride and tris (B-chloroethyl) amine hydrochloride for Hodgkin's Disease, Lymphosarcoma, Leukemia and Certain Allied and Miscellaneous Disorders, J.A.M.A. 132: 126 (Sept. 21) 1946.

[45] Jacobson, L. O. *et al:* Nitrogen Mustard Therapy; Studies on Effect of methyl-bis (beta-chloroethyl) amine hydrochloride on neoplastic diseases and allied disorders of hemopoietic system, J.A.M.A. 132:263 (Oct. 5) 1946.

[46] Rhoads, C. P.: Nitrogen Mustards in Treatment of Neoplastic Disease; Official Statement, J.A.M.A. 131:656 (June 22) 1946.

lymphoblastomata and then in that it induces remissions, thus giving palliation and prolonging life to a limited degree. In mycosis fungoides it brings about a dramatic amelioration of the cutaneous manifestations and makes the patient much more comfortable, though it has little if any influence upon the progress of the disease otherwise. In general it has been ineffective in other forms of "cancer" with the possible exception of bronchogenic adenomata and adeno-carcinomata of the lung, and surprisingly in five cases with us of pelvic masses of carcinoma, the primary site being in the cervix uteri.

Two other chemical substances should be mentioned in passing, although their clinical trials have not yet been sufficiently extensive to carry them beyond the experimental stage. These are "Stilbamidine",[47] which has shown some beneficial effect in multiple myeloma, and urethane (ethyl carbamate),[22] particularly in chronic myelogenous leukemia.

Lastly to be considered among this bizarre group of chemical agents is pteroyltriglutamic acid ("Teropterin"), a close relative of folic acid. Work of Lewisohn and others in animals suggested that it might produce regression in carcinoma. Clinical experience so far [48] has not demonstrated any such effect, though there may be an improvement in the well-being of the patient, possibly as a result of its "folic acid–like" action upon the liver.

Isotopes

Lastly one must refer to the radio-active isotopes, whose chief value at present and very possibly in the future may be that of tracer elements in the study of the metabolic and chemical processes in the body. Some of these show promise at the moment in respect to the treatment of "cancer." The radio-active isotopes of iodine are highly effective in the treatment of hyperthyroidism and there is evidence to indicate that in the carcinoma of the thyroid which is functional in respect to thyroxin, by no means frequently the case, the use of this method of carrying radiation to the "cancer" cell may be of value.[49] Again it must be warned that this is highly experimental, and fraught with technical difficulties and danger to the attending personnel and patient alike.

Another radio-active isotope, now extensively studied in relation to "cancer," is P_{32}. This has been used notably by John Lawrence [50] in the treatment of leukemias and in several of the dyscrasias, probably neoplastic, of the hematopoietic system such as polycythemia vera, chronic lymphatic leukemia, and chronic myelogenous leukemia. The results so far show no material change in the fundamental disease process but do provide effective palliation over considerable periods of time.

With the development of larger cyclotrons and particularly with the use of the atomic pile for the purpose of producing isotopes, investigation in respect to "cancer" with these will be rapidly intensified and extended. The chemical selectivity of specific growths will be established by the tracer type of investigation. If and when it is found that there accumulates within the growth, wherever it may be present in the body, a relatively larger proportion of the isotope in question, then it will be possible by therapeutic experimentation to explore the possibilities of producing sufficient localized radiation directly within these cells to differentially destroy them. This, in a more refined and accurate way, is an extension of the so-called "spray method" of roentgen radiation, to which it should be vastly superior.

A warning should be sounded that these radio-active isotopes employed as therapeutic agents will probably never be available for use except under carefully controlled circumstances. Tracer elements in minute dosages may be used with relative safety, particularly those with a short life, under certain not too exacting precautions. But when one gets over into the use of longer-lived radio-active isotopes in doses sufficient for therapeutic purposes, the most careful control will be necessary for the safety both of the patient and of the personnel using this potentially dangerous material. This will probably mean that the employment of it will have to be concentrated in a relatively few institutions, able not only to undertake doing this with proper care and discretion but also prepared to underwrite the necessary financial commitments involved in establishing such therapeutic laboratories.

While the discussion of these radio-active isotopes has been brief and without detail, this is not done for the purpose of minimizing their possible importance. If I were so foolish as to attempt to foretell the progress of events as regards the therapy of "cancer" during the next five years, I should be inclined to predict that it will lie in the use of these radio-active isotopes that we have so briefly commented upon.

[47] Snapper, I.: Stilbamidine and Pentamidine in Multiple Myeloma, J.A.M.A. 133:157 (Jan. 18) 1947.

[48] Farber, S. *et al:* The Action of Pteroylglutamic Conjugates on Man, Science 106:619 (Dec. 19) 1947.

[49] Chapman, E. M. and Evans, R. D.: Treatment of Hyperthyroidism with Radioactive Iodine, J.A.M.A. 131:86 (May 11) 1946.

[50] Lawrence, J. H.: The Use of Isotopes in Medical Research, J.A.M.A. 134:219 (May 17) 1947. Lawrence, J. H. *et al:* Chronic Myelogenous Leukemia, J.A.M.A. 136:672 (March 6) 1948.

Pathologic Anatomy and Biology

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THE TITLE of tonight's address may warrant some introductory remarks. The association of pathologic anatomy and biology in the title will emphasize their reciprocal relation, but it might imply that this connection has still to be proven. Obviously pathologic anatomy, concerned with the structural aspect of abnormal life, is a biologic science. But what is the ultimate purpose of investigation of structure in human disease? Since diagnosis in medicine is still largely based upon the recognition of alteration of form, gross and microscopic, anatomic examination of morbid states has been and will continue to be a pivot in the practice of medicine and in its teaching. But, as Thomas Huxley maintains, "we should not forget that there must be and is such a thing as a pure science of medicine, a pathology which has no more necessary subservience to practical ends than has zoology or botany." Pathology, in Huxley's sense, is primarily concerned with the intrinsic reason of *pathos,* the cause and mechanism of disease.

For nearly a century following Morgagni, research in pathology was conducted mainly along anatomical lines. However, the striking advances of the etiologic sciences, bacteriology and immunology, and the application of exact chemical and physical methods in the analysis of functional disturbances, led to a reorientation of the science of medicine. Pathologic anatomy was censured as being concerned with the final phases of disease only. A dynamic approach was advocated in which experimental reproduction of disease would replace the mere inference as to the probable mechanism, which was all that could be expected from the static investigations of the pathologic anatomist. Of course, experimental proof of a hypothesis must be the aim of biologic research in medicine as it holds for all natural sciences. But we must not forget that experimental pathology rests upon exact morphologic observations in human pathology and that synthesis by experiment must be preceded by analysis and correlation of the observed facts. This was clearly expressed by Virchow, who said that an unbiased anatomic perception permits of the recognition of causal relationships, and that the experiment is the control for the conclusion reached by morbid anatomy. The pathologic anatomist, in his investigations, is aware that alteration of structure is not the cause but only a manifestation of disease, that it is the result of an altered vital process which he must try to reconstruct.

This scope assigns to the individual pathologist of today a task which far exceeds his scientific qualification; yet pathologic anatomy must demand from its practitioners that they be able to grasp the biological problem, broad enough to comprehend its connections with other areas of biology, and ready to attract the cooperation of specialists in different fields of natural science. In this coordination of knowledge and effort lies the future of pathologic anatomy and the progress of medicine. I should like to illustrate this belief with some experiences which have captivated my interest for some time.

The evolutionary potency of embryonal cells has been obvious for many years; particular interest has always been attached to the potency of the mesenchymal cells because many seemingly heterogeneous cell types of the adult organism can be traced to a common ancestral cell of the early mesenchyme. The relationship of some of these cells in postnatal life was realized by histologists around the turn of the last century, but we owe to modern histology, using experimental methods, the information that even in the adult organism there exist mesenchymal cells which have retained their embryonal potencies of differentiation. This conception, which has been developed mainly by Maximow and his school, is of fundamental importance for the interpretation of diseases of the hematopoietic system. These morbid states have previously been strictly separated into a multitude of entities. Today we still separate these morbid processes characterized by generalized involvement of the hematopoietic system, but we classify them mainly into two groups, according to the recognizable differentiation of the ancestral mesenchymal cell into hematocytic or histiocytic types. The hematocytic group includes obviously the leukemias, lymphosarcomatosis and allied conditions, while Hodgkin's disease belongs to the other

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group. Our diagnosis is primarily based on gross anatomic and particularly cytologic criteria. In a number of cases the differentiation between these two groups is most difficult, and this has been the reason why some competent pathologists have advocated a unitarian clasification placing all these diseases under the common term of malignant lymphoma.

Those of us who still believe in a strict separation of the generalized diseases of the hematopoietic system do so because they recognize in Hodgkin's disease the basic polymorphous pattern of cell proliferation of reactive nature, while the other group reflects a uniform cell proliferation of hyperplastic or neoplastic character. There are, however, cases of Hodgkins' disease in which the granulomatous pleomorphous feature is not so clear; such cases seem obviously to support the unitarian concept. Yet, if one were able to recognize the histiocytic character of the diffuse cell proliferation in such instances, one would be justified in a strict separation, even of such cases, from the hematocytic group. The cell diagnosis based on the static principles of structural characteristics is often equivocal, and therefore diagnostic interpretation of cell types is open to argument. It is for this reason that investigations have been conducted to ascertain the true nature of the cell types by explantation and observation in tissue culture. Obviously such investigations not only are complicated, but cannot be conducted on post mortem material. Fortunately a decision can be reached by unbiased, but rational microscopic analysis. I should like to illustrate this statement by a recent observation.

A fifty-five year old white male complained of cervical adenopathy. A lymph node removed for histologic examination revealed a pleomorphous cell proliferation with many Reed-Sternberg cells, histiocytes, lymphocytes and eosinophile leucocytes. Hodgkin's disease was diagnosed. The patient received a full course of radiotherapy. However, he became weak, dyspneic and orthopneic. Three months later he died. At autopsy generalized enlargement of lymph nodes was found. The spleen was enlarged and showed on cross-section several white, round, sharply defined nodules, 3 to 8 mm. in diameter. Similar nodular infiltrations were found in the liver. Both kidneys were riddled with large, white nodes which replaced much of the renal parenchyma. In both lungs grayish-white infiltrations were seen. The gross anatomic picture differed from the classical findings in Hodgkin's disease because of the conspicuous white and cellular appearance of the organ infiltrations. Microscopic examination disclosed that all the infiltrations in the different organs were composed of a uniform cell type and lacked the pleomorphism which was seen in the original lymph node biopsy. The type cell was large, polygonal with frequent processes, occasionally round. There was abundant neutrophile cytoplasm; the nucleus was large and round, with scanty chromatin and a conspicuously large, round acidophile nucleolus. Because of these features it had to be regarded as an embryonal mesenchymal cell, commonly referred to as reticulum cell. The generalization of this profuse reticulum cell proliferation in the lymph nodes and the neoplastic character of the nodular infiltrations in the various organs supported the diagnosis of reticulum cell sarcomatosis. But the rather frequent observation of a rounding off of the cells with increasing chromatin content of the nuclei suggested that the immature and multipotent cells showed an orientation toward lymphoblastic, i.e. hematic cell differentiation. If this cytologic interpretation were correct, one was forced to conclude that this case represented a transformation of Hodgkin's disease into reticulum cell lymphosarcomatosis.

The significance of such an observation in support of the unitarian concept of diseases of the hematopoietic system is obvious. However, one must be aware that cell diagnosis based only on the criteria of nuclear and cytoplasmic structure is not entirely reliable and is particularly hazardous in the analysis of abnormal cells of mesenchymal origin. In the diagnosis of mesenchymal cells the method of intra- or supra-vital staining offers an excellent tool for exact differentiation between hematic and histiocytic cell types. Unfortunately these methods could not be applied to the fixed post mortem material of the case under consideration. But a purposeful search of the histiologic preparations disclosed cell features which permitted an unequivocal classification of the problematic cells. Upon study of the sections of the lung it was noticed that many alveoli contained aspirated lipid material which was phagocyted by macrophages. A systematic search of those areas of the lung which were infiltrated by the large neoplastic cells disclosed that many of them were filled with the same lipid material which was brilliantly stained by Sudan red. This observation of nature's experiment unveiled their histiocytic character, since hematic cells have no phagocytic ability. It demonstrated that the histiocytic differentiation of the embryonal reticulum, which is the basic feature of Hodgkin's disease, still persisted, although it was not as obvious in the final state of the disease as in the pleomorphous, granulomatous phase seen in the biopsy.

Reference has already been made to the difficulties of cell diagnosis based on the conventional

criteria of cytology. The longer one is engaged in microscopic research the more one becomes aware of the inadequacy of the purely morphologic interpretation of structure. In recent years great advances have been made in normal cytology by the application of microchemical methods. The demonstration of enzyme activity such as phosphatase and lipase permits of its visualization within tissue and cell elements. The application of these methods in pathologic anatomy has just been started. The results have not yet been more than encouraging. However, the pathologic anatomist who is searching for evidence of abnormal function as suggested by variation in structure must be prepared to apply himself to such studies despite temporary defeat.

A recent paper entitled "The Mechanism of the Fanconi Syndrome" well demonstrates the value of such methods for the elucidation of a rare human disease. This disease was first described in 1926 as a peculiar syndrome in children, characterized by rickets, resistance to vitamin D, low serum phosphate levels, and renal glycosuria. Subsequently it was observed that these patients show an excessive urinary excretion of organic acids, which were recognized as amino-acids. A recent report by Stowers and Dent has demonstrated that the convoluted tubules of the kidney showed a marked reduction in phosphatase activity. This deficiency results in incompetence of the renal tubules to reabsorb glucose, amino-acids and phosphates, with a tendency to chronic acidosis. It is obvious that this ingenious explanation of an obscure human malady could only be achieved because of the efficiency and competence of the pathologic anatomic investigation. This observation illustrates that with the application of subtle histochemical methods new insight is gained into the mechanism of disease. We might say that in this field of investigation the chemist has led the histologist. But the morphologist has always been interested in the chemical and physical constitution of organized structure. To quote again from the past, Koelliker, nearly 100 years ago, stated that it was the aim of histology to recognize the molecular structure of tissues and cells, and Virchow insisted upon integration of morphological with chemical investigation in pathology. Brilliant advances have been made in cytology and genetics by combining the principle of anatomy—to separate separable things—with the methods of analytical chemistry and physics. In pathologic anatomy certain conspicuous, visible aberrations of structure have always been utilized for the characterization of pathologic states. But we cannot rest content with the static perception of structural alteration. The biologically minded anatomist must aim at an understanding of structure in terms of matter. I should like to illustrate this statement with some observations which have their origin in the combined efforts of cytology and chemistry.

Nearly eighty years ago Miescher and later Kossel demonstrated the presence of chemically characteristic proteins within nuclei of animals and plants. Since that time chemists have been engaged in the further analysis of the nucleoproteins. In 1924 Feulgen devised a method by which nucleoproteins could be made visible within the chromatin of the cell nuclei. This discovery is one of the milestones in the development of cytochemistry. In subsequent years it was shown that the cytoplasm of cells also contains a nucleoprotein. The nucleoproteins are very complex chemical compounds, partly composed of nucleic acid. The nuclear chromatin contains desoxyribose nucleic acid, while the cytoplasm and nucleolus contain ribose nucleic acid. Within the past decade great advances have been made in the chemical and chemico-physical definition of nucleic acids. Enzymes have been isolated from the pancreas which act upon the individual nucleic acid; with ultraspectrography the characteristic absorption spectra have been determined.

Cytologists and geneticists have used these methods in the examination of cells and cell constituents, combining the most advanced technique of ultracentrifugation and ultraspectromicrography with the older staining practices of conventional histology. Some of their results have clarified the fundamental nature of some structural observations with which pathologic anatomists have been familiar for many years. For instance, basophilia of the cytoplasm of certain cells as indicated by brilliant red stain with pyroninmethyl green has been known for a long time; thanks to the disclosure of modern cytochemistry we now know that this staining reaction is due to an increased content of ribose nucleic acid in the cytoplasm. We have also learned that intense pyroninophilia is characteristic of embryonal cells, and, in general, of cells with active protein synthesis.

While the relationship between nucleolus and chromatin is not yet fully understood, it has been established that both are of the greatest importance in the regulation of nucleic acid metabolism as it pertains to the life and propagation of the cell. Structural alterations in the nucleus such as increase or clumping of the chromatin threads or, particularly, enlargement of the nucleoli, are features of abnormal and especially of neoplastic cells which have been known to the pathologic anatomist for many years, and used by him in his diagnosis. Today we have learned that these altera-

tions of structure can and must be interpreted in terms of alteration of matter and consequently of function.

Another line of research, combining morphologic analysis with investigations in chemistry and physics, originated in histologic observations of widespread connective tissue alterations in various diseases. In the course of these studies it became necessary to inquire into the constitution of the collagenous tissue. This basic material of the human body consists not only of cells and fibers, but also of a homogeneous ground-substance which, under normal conditions, is not very conspicuous. In the diseases under consideration the connective tissue shows striking changes. In acute lupus erythematosus, for instance, the connective tissue fibers undergo fibrinoid alterations and the ground-substance becomes very prominent. It soon became evident to us that the conventional methods of histologic technique were inadequate to ascertain the nature and pathogenesis of these connective tissue alterations. In our investigations, therefore, we tried to determine first the chemical nature of the conspicuous alterations of the ground-substance, and used x-ray diffraction for an inquiry into the molecular constitution of the abnormal collagen fibers.

Moreover, we had to consider that similar connective tissue changes, particularly the fibrinoid alteration of collagen fibers, occur in a variety of diseases, such as rheumatic fever, rheumatoid arthritis, polyarteritis nodosa and diffuse scleroderma. One had to pose the question whether the morphologic similarity of the tissue changes pointed to a pathogenetic relationship. The fact that fibrinoid collagen changes can be provoked in animals by the production of local hypersensitivity has caused many investigators to believe that any malady characterized by such histologic changes is presumably of allergic nature. We did not agree with this conclusion as far as acute lupus erythematosus is concerned because there is no evidence of hypersensitivity in the clinical course of the disease. Moreover, collagen alterations identical with or hardly distinguishable from those seen in allergy can be produced experimentally by various factors. The recognition that similar tissue changes can be the result of different causes is not surprising, because we know that the mode of response of tissue to injury is not unlimited. Consequently we must try experimentally to identify the conspicuous alterations of the connective tissue in human disease in terms of reactions to well defined chemical and physical influences. There are some fragmentary observations available, such as the effect of hyaluronidase and female sex hormones upon the ground-substance and the action of bacterial extracts (B.Welchii) upon collagen fibers. Detailed investigations have only recently been started and have not yet been completed.

It is the primary object of pathologic anatomy to recognize the structural alterations which are characteristic of disease. But the pathologic anatomist must be aware that he is not only to dissect the facts of altered structure, that he is not only an anatomist, but that he is also a pathologist. Pathology is concerned with the ultimate reason of disease, with its cause and mechanism. Disease is life under altered conditions and it is the study of disordered life which is the object of pathology, which Huxley called the "pure science of medicine." Life manifests itself in form and action. The problem of altered life can therefore be approached from the structural and the functional aspect. There is no antithesis of form and function; normal structure is guaranteed by the fundamental function of assimilation and reproduction, and normal function is anchored in the maintenance of structure. If we always remember that structure is one aspect of life, then we must realize that pathologic anatomy is not concerned with the dead. What we observe at the autopsy table and what we study in the microscope is only a phase in the process of life. Anatomic pathology must reconstruct and visualize this process. In this vista pathologic anatomy is inseparably connected with biology dedicated, not to the study of the dead, but to an inquiry into life.

The Cytologic Diagnosis of Cancer by the Smear Technique

1. History, Applications and Future of Method

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OVER THIRTY YEARS AGO Charles R. Stockard and George N. Papanicolaou made their first report on a study of vaginal smears in guinea pigs.[1] Papanicolaou describes as accidental[2] the introduction of the vaginal smear in the study of the sex cycle of guinea pigs, and states that he personally "was planning to investigate further the problem of sex determination and sex control in the guinea pig" when the use of the vaginal smear was discovered. This work was reported as far back as 1915.[3]

The early work of Papanicolaou and his associates was based on the study of exfoliated cells in the vaginal secretions. It was discovered that cancers of the female genitalia are exfoliative lesions, and cells detached from their surfaces eventually find their way into the lumen of the uterus and vagina where they accumulate and are mixed with the desquamated normal epithelial cells. This process, which is described as a natural curettage going on uninterruptedly, always provides fresh and easily obtainable material for study. This material may consist not only of single cells but also fragments of tissue which at times may permit histologic as well as cytologic examination. Papanicolaou first announced that he could diagnose cancer of the uterus through vaginal smears in 1928.[4]

The basic principle of utilizing this natural exfoliative process for the recognition of pathologic changes has been applied to the examination of secretions from various organs of the body, so that now diagnostic assistance may be obtained through the examination of bronchial secretions or sputum in diagnosing malignant lesions of the pulmonary system; through the examination of gastric washings in malignancy of the stomach; by examining the prostatic secretions in looking for malignant lesions of the prostate; and through the examination of urinary sediment for diagnosing lesions of the genito-urinary system.

Technical methods for preparing specimens to be examined will be discussed in a second report. Briefly, the material to be examined is spread on a microscope slide and immediately fixed for thirty minutes in a mixture of equal parts of ether and 95 per cent ethyl alcohol. No harm is produced by leaving it in the fixing solution for as long as several weeks. The second step in the process of preparing the slide for examination is proper staining. Papanicolaou has devised a special stain for this purpose.

Although the preparation and staining of cytological specimens is relatively easy, interpretation is quite difficult. It is based on cytological rather than histological criteria, and thus requires special training. A laboratory technician can be trained to screen the slides. This is a very laborious process, requiring about 15 to 20 minutes per slide. Then the cytologist must spend additional time deciding whether the slide contains malignant cells. The nuclear changes in malignant cells are the characteristic and important ones: the nuclei are usually large, variable in size and shape, hyperchromatic, and may show fragmentation; nucleoli may be prominent. Occasionally mitotic figures are seen, but they do not indicate malignancy, since normal cells may also show mitotic figures. The cytoplasm of the malignant cells may appear to be entirely absent or may be very scanty. Malignant cells will often be found in clumps. Many of the malignant cells attain bizarre shapes; some, for example, appear as spindle cells and have been termed fiber cells by some workers. Others resemble tadpoles, and thus have been given this name. In cytologic specimens from the vagina or cervix, red blood cells should be looked for when malignancy is suspected. Occasionally the malignant cells, especially from adenocarcinomas, will

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[2] Papanicolaou, G. N.: A General Survey of the Vaginal Smear and Its Use in Research and Diagnosis, Am. J. Obst. & Gynec. 51: 316 (Mar.) 1946.

[3] Papanicolaou, G. N.: Sex Determination and Sex Control in Guinea Pigs, Science 41:401 (Mar.) 1915.

[4] Papanicolaou, G. N.: Proc. Third Race Betterment Conference, p. 528, 1928, cited by Papanicolaou, G. N.—The Vaginal and Endometrial Smear as a Diagnostic Procedure in Cancer of the Uterus, N. Y. State J. Med. 45:1336 (June 15) 1945.

present vacuoles, and may contain red blood cells, polymorphonuclears or debris. In general, however, it can be stated that the nuclear changes of malignant cells offer the most reliable diagnostic criteria in the cytologic examination for cancer.

At this point it might be stated that the gynecologists have, up until this time, obtained more diagnostic assistance from the cytologic technique than any other group of practitioners. This was probably due to the fact that the vaginal smear was early found to be of aid in the evaluation of estrogen therapy and in studying the sex cycle of the female. Notable among the gynecologists who have contributed to the development of this technique is Herbert F. Traut who, with Papanicolaou, wrote a monograph on this subject in 1943.[5] J. Ernest Ayre has developed a technique for mailing specimens and a method of obtaining malignant cells before they are exfoliated from the surface of the lesion.[6] The most frequent point of origin of uterine cancer is the squamo-columnar junction on the cervix, and Ayre has developed a special scraper for obtaining what he calls a "surface biopsy" from this area, so that malignant cells can be demonstrated before they are actually shed from the lesion. Many other gynecologists such as Joe Vincent Meigs and his associates at Harvard Medical School have also contributed a great deal to the cytologic technique.

Pathologists have been slower in accepting the cytologic technique than gynecologists; however, the American Board of Pathology[7] expects to require training in the cytological technique for certification. On April 12 and 13, 1948, a symposium on the cytologic diagnostic methods was held in Boston under the auspices of the American Cancer Society. Most of the men attending this symposium were well known practicing pathologists. Notable among them were William Boyd, Shields Warren, N. Chandler Foote, Tracy Mallory, Warren Hunter, and Fred Stewart. The conference concluded the cytologic diagnosis of cancer from the study of exfoliated malignant cells is here to stay, and that steps should be taken to insure that residents in pathology will acquire training in this method of cancer diagnosis.[8] Shields Warren, with Olive Gates of Boston, has written a monograph on the subject of the diagnosis of cancer of the uterus by use of the vaginal smear.[9]

How accurate is this method of cancer diagnosis? In dealing with lesions of the female genital system, the overall accuracy as reported by Papanicolaou and Traut was 99.7 per cent. Such a high degree of accuracy as this requires masters at the technique to examine the slides. Other competent workers have obtained an overall accuracy of 96 to 98 per cent.[10] Isbell and Jewett[11] reported on a study of 1,045 vaginal smears and the corresponding uterine, cervical or vaginal tissue sections. In 1,000 of the cases, 60 malignancies of the female genital system were encountered. In reporting their results, they gave a total error, of positive cases called negative, of 6.66 per cent. These would be termed false negative reports. There was also in this group a total of eleven, or 1.7 per cent, false positive reports. The total combined error in this study was 1.5 per cent. Their conclusion was that the vaginal smear method was a vital and accurate adjunct to gynecological examinations.

As to the accuracy of the cytologic method in examinations of the pulmonary, gastrointestinal, or urinary system, it is difficult to make a definite statement. However, some workers have reported studies on small numbers of patients. Herbut and Clerf[12] studied bronchial secretions on thirty cases of bronchogenic carcinoma and found twenty-two of the cases (or 73 per cent) positive for cancer cells on cytologic examination. Herbut and Lubin[13] studied prostatic secretions from 100 patients. Seventeen of these yielded positive cytologic diagnoses of cancer. The presence of carcinoma was confirmed histologically in 10 cases and clinically in 6 of the 17 cases. Block and Bryant[14] have reported on a study of the fasting gastric juice for cancer cells in an effort to evaluate the accuracy of this method in the diagnosis of gastric neoplasms. A correlation was made with the clinical picture, roentgenographic observations, laparotomy and gastric analysis. Their conclusion was that the technique is accurate in 50 to 60 per cent of cases. (The number of cases studied was not stated in the abstract which was available.) As more experience is gained by workers in applying this technique to various sites of the body, it seems likely that its accuracy will be increased.

The need for medical personnel trained in the

[5] Papanicolaou, G. N., and Traut, H. F.: Diagnosis of Uterine Cancer by the Vaginal Smear, Commonwealth Fund, New York, 1943.

[6] Ayre, J. E.: Selective Cytology Smear for Diagnosis of Cancer, Am. J. Obst. & Gynec. 53:609 (Apr.) 1947.

[7] Wood, D.: Unpublished lecture.

[8] College of American Pathologists, Secretary's News Letter, June, 1948.

[9] Gates, O., and Warren, S.: A Handbook for the Diagnosis of Cancer of the Uterus by the Use of Vaginal Smears, Ed. II, Harvard Univ. Press, 1948.

[10] Warren, S.: Mimeographed report: The Papanicolaou Vaginal Smear Technique for the Diagnosis of Uterine Cancer.

[11] Isbell, N. P., and Jewett, J. F., *et al,* A Correlation between Vaginal Smear and Tissue Diagnosis in 1045 Operated Gynecologic Cases, Am. J. Obst. & Gynec. 54:576 (Oct.) 1947.

[12] Herbut, P. A., and Clerf, L. H.: Bronchogenic Carcinoma: Diagnosis by Cytologic Study of Bronchoscopically Removed Secretions, J.A.M.A. 130:1006 (Apr. 13) 1946.

[13] Herbut, P. A., and Lubin, E. N.: Cancer Cells in Prostatic Secretions, J. Urology 57:542 (Mar.) 1947.

[14] Block, M., and Bryant, H. C.: The Diagnosis of Gastric Neoplasm by Cytologic Examination of Gastric Secretions. Unpublished report preesnted at 97th Annual Session of A.M.A., Chicago, Ill., June 21-25, 1948.

cytologic diagnosis of cancer by the smear technique has been recognized, and training is now being offered in at least three locations in the United States. Physicians are given two weeks of intensive training. Technicians are given four months' training in the screening technique. The first training center was started by Papanicolaou at Cornell University Medical College in New York City. During the past year he has trained over 400 physicians and technicians in his laboratory. The technique is also being taught in Boston under the direction of Meigs, Warren, and their assistants. The course in Boston has been offered for a shorter period of time than has the one at Cornell, but a considerable number of medical personnel have already been trained there. The University of California Medical School in San Francisco recently started offering a course in this technique under the direction of Herbert F. Traut, and thus far one class of sixty-six physicians has been trained.

Applications and Future of the Technique

1. The cytologic technique for the diagnosis of cancer by smears is considered to be of value. Its usefulness may be classified under the following headings:
   A. As a screening test for large numbers of patients, as in a cancer detection clinic, this technique will reveal some, but very few, unsuspected malignancies, perhaps one case in 200 asymptomatic women.[15] The cost, per positive case found, would be considerable.
   B. In the follow-up of patients treated for cancer with radiation, some workers have noted peculiar changes in malignant and normal cells found in the smears.[16] After radiation therapy, it is noted that the cellular changes in the malignant lesions are more marked in those patients who have a good response to radiation. It thus appears that a daily study of the vaginal smear during a course of radiation for uterine malignancy might be a useful guide in the prognosis of a cancer case.
   C. As a diagnostic aid in cases of obscure or suspected malignancy, the cytologic technique seems to have promise. It has been found by some workers[17] that the cytologic technique may discover malignant lesions of the stomach and pulmonary system which would not be diagnosed by x-ray or other procedure, and other workers have reported several cases of malignancies in the female genital organs which were positive on the cytologic test, and only after several biopsies or even with the surgical pathological specimen was it possible to locate the source from which the cancer cells were exfoliated.
2. It should be emphasized that all diagnoses made by the cytologic technique must be confirmed or excluded by tissue studies if possible. Especially should this be insisted upon where the cancers are suspected in accessible locations.
3. All workers in this field advise conservatism in making a diagnosis of cancer by means of smears. It is most important to err on the conservative side if an error is to be made. In other words, the smallest possible number of false positive diagnoses should be the rule.[2] It has been stated[18] that when a false positive diagnosis is suspected, the burden of proof to show that it is a false positive should be on the pathologist. A false negative diagnosis simply means that the cancer cells were not found in the slide which was examined. The slide examined may not have contained malignant cells or they may have been present but not recognized.
4. It seems fair to state that the cytologic technique for the diagnosis of cancer by smear is here to stay and will prove more valuable as a diagnostic aid when a sufficient number of technicians are trained in preparing slides and adequate cytologists are available to interpret the preparations.

[15] Warren, S.: Mimeographed report quoting work of Papanicolaou and Lombard.

[16] Graham, R. M.: The Effect of Radiation on Vaginal Smears in Cervical Carcinoma, I. Description of Cellular Changes, II. The Prognostic Significance, Surg. Gynec. & Obst. 84:153 (Feb.) 1947.

[17] Richardson, H. L., Unpublished lecture.

[18] Wood, D., Unpublished lecture.

Carcinoma of the Stomach in Hawaii

A Review of 121 Gastric Lesions at The Queen's Hospital

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CARCINOMA of the stomach is one of the most frequent carcinomas found in the human race, and causes 20 per cent of all deaths due to malignancy. Every year 40,000 Americans die of carcinoma of the stomach,[1] a total greater than the number killed annually as a result of auto accidents. During World War II, gastric malignancy killed more Americans yearly than enemy action did. The mortality is extremely high and the curability rate has not changed appreciably in the last 20 years. In 1928 Moynihan[2] reported 5 per cent cures, while recent figures show only 5 to 8 per cent cures over a 5 year period. Such a persistently low curability rate demands more investigation, which is the purpose of this paper.

For this paper all of the cases of gastric lesions seen in The Queen's Hospital during the period from January, 1947, through July, 1948, were studied. There were a total of 121 patients with gastric lesions during this period. Of this number 52 had gastric carcinoma, 68 had benign gastric ulcer, and 1 had an angio-neuroma of the stomach. Non-specific cases such as gastritis, and records which were grossly inadequate, were not included.

The distribution of carcinoma by race was as follows: Japanese 48 per cent, Caucasian 20 per cent, Chinese and Korean together 16 per cent, Hawaiian 12 per cent, and Filipino 4 per cent. Thus it is seen that one-half of all the cases were Japanese, and yet they comprise only one-third of the population of the Hawaiian Islands. Analysis by age showed the highest incidence (34 per cent) to be between the ages of 60 and 69. It is surprising that 6 per cent occurred between the ages of 20 and 29. Of the remainder, 12 per cent occurred in the thirties, 15 per cent in the forties, 12 per cent in the fifties, and 21 per cent in the seventies and eighties.

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[1] Anglem, T. J.: Dyspepsia, Ulcer, and Gastric Cancer, New Eng. J. Med. 235:322 (Sept. 5) 1946.

[2] Moynihan, B.: Cancer of Stomach, Practitioner 121:137, 1928.

Cancer Misdiagnosed as Ulcer

A complete study of the cases diagnosed as benign ulcer was not made, as this paper is primarily concerned with gastric carcinoma. Because of the high incidence of carcinoma of the stomach, and the difficulty with which it may sometimes be distinguished from gastric ulcer, doubtless some patients diagnosed as having benign lesions, and/or who have had inadequate diagnostic studies, will be readmitted with malignancy.

Case Report

Case No. 211065, G.N., a Japanese man, age 65, was admitted August, 1946, complaining of upper abdominal pain for three or four months, despite peptic ulcer therapy. Physical examination showed only some tenderness in the right upper quadrant. Laboratory studies showed hemoglobin 8 grams, stool 4 plus for blood. No gastric analysis was made. Cholecystogram was negative, but no gastro-intestinal x-rays were made. Patient was treated conservatively and discharged with the diagnosis of "probable peptic ulcer." He was readmitted five months later, in January, 1947, with acute abdominal pain. He expired the day of admission. Autopsy showed a gastric carcinoma with perforation and peritonitis.

Not all of the suspected benign ulcers were treated medically. Of 71 cases of clinically benign ulcer in this series, 23 had subtotal gastrectomies. Pathological examination of the 23 stomachs removed showed carcinoma to be present in 3 (or 13 per cent). None of these had been suspected clinically. Recent figures from the Lahey Clinic show the operative mortality for subtotal gastrectomy in benign ulcer is less than 1 per cent. In this series the operative mortality was 3½ per cent (1 death). This indicates that the danger of conservative treatment may be greater than the risk of radical treatment in clinically benign gastric ulcer. Partial gastrectomy will not only prevent but probably cure early malignancy, and may also prevent the common complications of benign gastric ulcer per se, such as hemorrhage, perforation, or pyloric obstruction.

It is interesting to note that in the 52 cases of gastric carcinoma 16 were treated medically for periods varying from six weeks to six years prior to surgical intervention, the average delay being nineteen months. Of this group 14 cases were treated for peptic ulcer, and 1 case was treated for gall bladder disease. Thus it may be seen that 30 per cent of the patients with known gastric pathology were treated medically and later were proved to be carcinoma.

Case Reports

Case No. 7267, S.I., a 28 year old Japanese man, was admitted January, 1948, with mild burns of the extremities. During his twenty-day hospital stay, because of abdominal complaints, a gastrointestinal series was done. The findings were interpreted as showing a chronic gastric ulcer, arising along the lesser curvature of the distal gastric antrum. No gastric analysis was made. The patient was started on ulcer regimen to be continued at home, and discharged. He was readmitted five months later complaining of vomiting and nausea. An exploratory laporotomy showed an inoperable carcinoma of the stomach.

Case No. 3977, H.H., a 39 year old Japanese man, was treated one year for "peptic ulcer," shown by x-ray. Because of poor response to treatment a subtotal gastric resection was performed. Pathological examination showed a benign gastric ulcer, and in addition, on one border of the ulcer, there were malignant changes of "carcinoma *in situ*."

"Gastric Ulcer" May Actually be Gastric Cancer

The fact that carcinoma of the stomach occurs in youth fairly frequently does not seem to be generally recognized. When x-ray has revealed a gastric ulcer in a young person, the attending physician often has shunned surgery with the excuse that carcinoma is not likely. It is shown in this paper that 6 per cent of the carcinomas seen locally were in young people between the ages of 22 and 29. All of these had an x-ray diagnosis of gastric ulcer and were treated medically.

A recent article[3] from the University of Michigan presented a survey of 73 cases of gastric lesions occurring between the ages of sixteen and thirty years. Of the 73 cases, approximately 30 per cent were proven to be malignant. Most of the cases in which malignancy was proven, had previously been treated for peptic ulcer. The fact that a person is young does not warrant giving conservative gastric ulcer therapy, but is rather a stronger indication for immediate radical treatment.

The question arises as to whether a person should be given a four to six week medical trial, once the diagnosis of gastric ulcer is made. We feel that he should not. In the first place, even though a patient improves symptomatically during the medical trial, it is no proof the lesion is benign. Even malignant ulcerations may improve in x-ray appearance with ulcer therapy. The delay of four to six weeks may mean the difference between cure and palliation. Because of the rich lymphatic drainage and the motility of the stomach, a small malignant ulcer may well send off microscopic metastases in a period of one to four weeks even though the gross ulceration may appear unchanged in size. Frank Lahey stated[4] that all patients with gastric ulcers should be submitted to radical surgery. He said of medical treatment that "it has now been demonstrated beyond reasonable doubt that even in the presence of gastric cancer, apparent healing of the ulcerating lesion can be brought about under good medical management."

Case Report

Case No. 7451, B.M., a 25 year old Portuguese woman, admitted August, 1945, with intermittent epigastric pain. X-ray showed a prepyloric ulcer. No gastric analysis was recorded. The patient was discharged home on ulcer regimen. She was readmitted in June, 1948, because of continued gastric symptoms. Gastric analysis showed no free hydrochloric acid with alcohol meal. A subtotal gastrectomy was performed which showed a far-advanced adenocarcinoma of the stomach with metastases. Whether this was a primary carcinoma or an ulcer that became malignant cannot be determined.

Summary

1. A total of 121 cases of proved gastric lesions were seen in The Queen's Hospital since January, 1947. There were 68 cases of gastric ulcer, 52 of gastric carcinoma, and 1 of angioneuroma.

2. Forty-eight per cent of the carcinomas occurred in Japanese.

3. Thirteen per cent of the clinically benign gastric ulcers were found to be malignant at surgery.

4. Thirty per cent of the cases of carcinoma were treated medically for an average of nineteen months. This figure is probably much higher than 30 per cent, but definite proof was not found on the charts.

5. There were 3 cases of malignancy in patients between the ages of 22 and 29.

6. The mortality of gastric malignancy will not be reduced as long as patients with ulcerative gastric lesions are placed on temporizing treatment.

7. Early surgical treatment seems to be the therapy of choice in the prevention and cure of cancer of the stomach.

[3] Block, M.; Griep, A. H.; Pollard, M. H.: The Occurrence of Gastric Neoplasms in Youth, Am. J. Med. Sci. 215:398 (Apr.) 1948.

[4] Lahey, F. H.: Gastric Surgery, New Eng. J. Med. 234:809 (June 20) 1946.

The Treatment of Carcinoma of the Cervix

FRANK C. SPENCER, M.D.
HONOLULU

THE TREATMENT of carcinoma of the cervix in its various stages, and the complications induced by the disease and its treatment, are indeed a complex problem. Obviously each case must be individualized and evaluated. Not only must the specific disease be treated, but the overall condition of the patient must be considered. This will be brought out by considering forms of therapy, their indications and contraindications, treatment of complications and palliation.

In general there are two methods of treating this disease, surgery and radiation, or in some instances a combination of the two. At the turn of the century, when radiation was not available the only hope for cure in these cases was radical surgery: the so-called Wertheim operation, in which practically the entire generative tract was removed, along with the regional lymph glands up to the bifurcation of the aorta.

Such surgery carried with it a high operative mortality, so that radiation with both x-rays and radium was utilized as soon as it became available. The salvage rate with radiation was such an improvement over the radical surgery with its attendant mortality that for a time the accepted method of treatment of this disease was by radiation alone.

However, in the past few years, with the improvement in surgical technique, and the introduction of antibiotics and other chemotherapy, radical surgery is again being undertaken. This is only being done, as a rule, in a few teaching hospitals and research centers, and then usually following previous irradiation. Not enough cases have been reported to draw the definite conclusion that such procedures are justified by an increased salvage rate. There are those high in our specialty who would not do surgery on any carcinoma of the cervix except a grade 1, stage 1 lesion in a patient under 35 years of age. Radiation is still our best weapon in combating this disease.

It might be well to consider briefly some of the physical properties of radium, and the tissue reaction to its application. Radium gives off alpha and beta particles and gamma rays. The alpha and beta particles can all be filtered out by one-half millimeter of platinum. It is the gamma rays which actually cause the death of the malignant cells. Grossly radium has the following effect on tissue: (1) hyperemia for one week followed by (2) slough, which occurs in about three weeks; (3) suppuration in seven weeks; (4) contraction in eleven weeks; and (5) marked contraction after that. The microscopic effects are characterized by (1) hyperemia, (2) proliferation of leucocytes and lymphocytes, (3) necrosis of tumor cells, vacuolization and breaking up of the nucleus; (4) fibroblastic proliferation, and (5) epithelization and repair.

Before embarking on a program of therapy, a complete evaluation of the patient should be done. From that some idea of her vitality and the extent of the lesion should be gained. Such evaluation of course should include a complete physical examination and pelvic examination. Special studies should include cystoscopic and proctoscopic examination. A complete blood count and urinalysis are indicated.

Before radiation therapy of any form is used, the general well-being of the patient should be increased as much as possible. Iron and vitamins should be given liberally, together with a high caloric, low residue diet. Get the hemoglobin above 60 percent of normal—by transfusions if necessary. Clear up obvious infections by removing the foci and by the use of sulfonamides and penicillin. Do not give drastic cathartics, but use mineral oil for constipation. Alkaline douches may be prescribed, as the vaginal fluid in this disease is quite acid and irritating. "Triple sulfa" cream is also of use as it helps clear up infection and thus helps in the control of odor.

Radium should not be used under the following circumstances:

1. Extensive cachexia—give small doses of x-ray to control the pain.
2. When the hemoglobin is below 60 per cent.
3. When there is extensive bladder or rectal involvement (as a fistula may be produced). Always use x-ray first in extensive disease as it causes more fibrosis.
4. In pelvic inflammatory disease (as radium lights it up). Clear up the condition by drainage, sulfonamides or penicillin. Use x-ray before radium is used.
5. In severe anemia. Small doses of x-ray may stop the bleeding in about a week. Give transfusions and cauterize the growth.
6. In the presence of fistula.

Read before the Honolulu Obstetrical and Gynecological Society, March 15, 1948.

Much of the material used in the preparation of this paper is from the lectures of Drs. W. T. Dannreuther, M. Jordan and L. L. Mackenzie at the New York Post-Graduate Medical School.

7. Cysts and ovarian tumors should be removed first.
8. Pyometria—establish drainage and if the condition does not clear up, supravaginal hysterectomy may be necessary.
9. Where fibroids greater than 9 cm. in diameter are present. They might become necrotic and should be removed surgically before radiation.
10. In uncontrolled diabetes.
11. Extensive kidney involvement. Radium causes extensive tissue destruction with a subsequent rise in NPN and urea.

If it has been decided that a full therapeutic effect of radium is desired it may be applied in the following manner: Apply 25 mg. and 50 mg. in tandem in rubber tubing, with the 25 mg. in the fundus and the 50 mg. in the cervix; insert six 5 mg. needles around the clock directly into the cervical tissue. Leave the above amount in place for 3,150 mg. hours. The radium is then removed and a rest period of four to seven days is allowed. After that the same application is repeated without the use of the needles. This last application is then left in place until a total of 5,000 mg. hours has been given. If x-ray is then to be used there should be a rest period of two to three weeks.

In some institutions x-ray alone is used in the radiation of carcinoma of the cervix. Where such is the case x-ray is usually given through six pelvic portals—two anterior, two posterior, and one each laterally—and by the vaginal cone method. Vaginally, three portals are utilized—directly to the cervix and laterally toward each parametrium. A total of about 23,500 roentgens through all portals is used. X-ray through the vaginal portals is tolerated very well—there is less cystitis, proctitis and radiation sickness. I have heard it said that the vaginal cone method is the greatest contribution to the treatment of carcinoma of the cervix in the past twenty years.

The most common complication of radiation is so-called radiation sickness. This can usually be controlled by giving pyridoxine intravenously. Anemia frequently follows radiation and the hemoglobin may go down as low as 25 per cent. This can be combated with transfusions. Fistula is not an uncommon sequel and may develop in a few weeks to several years after radiation. Peritonitis and intestinal obstruction are among the more serious complications that should be watched for and treated according to the circumstances. Cystitis is not at all uncommon. Sulfonamides can be used for the infection. If the bladder is irrigated with warm boric solution and then one ounce of oil of cajaput instilled, the patient is greatly relieved. For diarrhea use kaopectate and kaomagma equal parts and give a tablespoonful every three hours. For proctitis give a saline enema followed by 4 ounces of kaomagma as a retention enema. If there is skin irritation do not use water, but keep the skin dry as possible. Baby oil may be used once a day followed with a dusting powder. If there is actual breakdown of the skin any burn ointment may be used.

Pregnancy associated with carcinoma of the cervix is an especially trying problem. In the first trimester treat the patient by radiation. She will abort and the abortion can be taken care of as a separate clinical problem. In the second trimester, consider the patient's desire for a child. If treatment is to be instituted, do a hysterotomy and remove the fetus first. In the third trimester do a cesarean section—never allow the patient to deliver through the vagina.

In the hopeless case, x-ray should be used as a palliative measure. Frequently great relief may be obtained, and extension of the tumor and metastases may be reduced in size, with much relief of pain. Medical measures for the relief of pain are inevitable. Carry the patient for as long as possible on acetylsalicylic acid alone, and then in combination with codeine. Nembutal, seconal or some other barbiturate may be used at night to induce sleep. Morphine is still the best drug for the absolute relief of pain but should be used sparingly and as late as possible. Addiction is easily acquired and a tolerance developed, so that it is necessary to give the drug in increasing doses. Then too, constipation is always associated with the use of morphine. Demerol and dolophine are becoming increasingly used for the relief of pain but they also are habit forming and are more expensive and less efficient than morphine.

Where there is much sloughing, irritating discharge and fetor, a patient can be made very grateful by the following procedure. Using a Ferguson speculum, remove necrotic material with acetone applicators. Dry the vagina and instill 1 ounce of acetone and allow it to remain twenty minutes. Then reinsert the speculum, wipe out the vagina and put in a mixture of equal parts of powdered charcoal and iodoform. This may be repeated every day. An alkaline douche may be used to relieve the irritation from the acid discharge. Potassium permangate 1 to 300 as a douche may also be used for the odor.

For severe uncontrolled pain, prefrontal lobotomy may be done. I would think this would be especially useful where the pain is due to nerve pressure from direct extension or distant metastases.

Finally, do not give a definite prognosis, especially when a case is first seen. Carcinoma of the cervix can be unpredictable. You may tell the family that the patient will be dead in six months and she may survive for several years. Then too, the patient you feel has a good chance may decline rapidly and be dead in a relatively short time.

Young Hotel Building.

Additional Report on Puerperal Sterilization in Hawaii (1943-47)

A Survey of the Operation in Three Honolulu Hospitals

H. E. BOWLES, M.D.
HONOLULU

DURING THE RECENT war, great numbers of physicians visited the Territory of Hawaii. Many of these visitors carried away the impression that there was an abnormally high incidence of sexual sterilization in Hawaii on both male and female patients. A survey was made of the situation in 1943 as it pertained to puerperal sterilization in the maternity departments of three of Honolulu's four larger hospitals. One of the institutions is a church hospital permitting no sterilizations in the absence of disease, and was not included in the series. The highest incidence in 1943 occurred in Hospital A, which had been approved by the American Medical Association for a rotating internship. It also had an accredited training school for nurses, and had recently incorporated a residency in obstetrics and gynecology in its training program. Hospital B, it should be noted, is exclusively a maternity and gynecological hospital with an approved and accredited residency in obstetrics. Hospital C has a training school for nurses, and an accredited rotating internship program.

In 1943 the author discussed the matter of a physician's obligation to his patient in explaining fully the significance of the operation of sexual sterilization. At that time, Hospital B was the only one requiring the services of a consultant. The rule in force at the time required the review of the case by two consultants to be chosen from a list selected by the hospital. A protest from many of the attending staff arose at once, and the rule was modified to read one consultant to be chosen by the attending physician from the entire list of those enjoying full staff privileges at the hospital. Despite the softening and modification of this rule in Hospital B, the total number of puerperal sterilizations has remained well below the 1943 figure of 1.6 per cent of all cases delivered exclusive of cesarean section. In this latter group it was felt that a different criterion for evaluation existed, namely the possibility of a weakened uterus due to repeated cesarean sections. These cases are, therefore, not included in any part of this study.

In 1943 following a study of puerperal sterilization in these three Honolulu hospitals, and the institution of a rule requiring one consultant to be picked by the attending physician from the staff at large, it was felt that the incidence of puerperal sterilization would drop. The following table of figures shows that it did drop temporarily in Hospital A (accredited rotating internship, training school for nurses, residency in obstetrics and gynecology). It has remained at a constantly low figure in Hospital B (obstetrical and gynecological hospital with accredited residency). It has risen to a higher figure in Hospital C (training school for nurses and approved rotating internship) than before inauguration of the consultation ruling.

The table of figures may be of interest.

	1943	1944	1945	1946	1947
Hospital A:					
Deliveries (excluding sections)	1963	1885	2014	1828	2064
% of total sterilized (excluding sections)	4.7	2.7	2.4	3.6	3.6
Hospital B:					
Deliveries (excluding sections)	2546	2570	2232	2854	3378
% of total sterilized (excluding sections)	1.6	0.6	0.8	1.0	0.74
Hospital C:					
Deliveries (excluding sections)	800	710	765	745	802
% of total sterilized (excluding sections)	3.8	4.5	3.1	4.4	4.7

A glance at the figures shows that Hospital B has maintained a consistently low figure—1 per cent or lower—and that in hospitals A and C, 3.6 and 4.7 per cent of women delivered vaginally in 1947 were sterilized in the puerperium. (Cesarean sections are not included.) At the time when the 1943 survey was made and reported, no consultation rules were in existence in A and C. Shortly after, however, a rule was instituted requiring consultation with one physician in good standing and a statement of indications for the operation and joint signatures of the surgeon and consultant.

Following establishment of the consultation ruling in A, the total of puerperal sterilizations done in 1944 and 1945 dropped to 2.7 per cent and 2.4 per cent of the total vaginal deliveries but rose sharply to 3.6 per cent in 1946 and 1947.

In C, the figures from 1943 to 1947 show a very gradual increase in the incidence of puerperal sterilizations despite the consultation ruling.

In Hospital A (approved by the American Medical Association for rotating internship, nurses' training school and residence in obstetrics), an analysis was recently made by a member of the standing medical committee (an experienced internist) in an attempt to determine whether the operation of puerperal sterilization was being performed unduly often. The report follows:

"February 17, 1947

"The Standing Medical Committee
"Hospital A
"Honolulu, T. H.

"Gentlemen:

"Pursuant to your request at the last dated meeting of the committee, the undersigned has reviewed the charts of all of the women upon whom a puerperal sterilization was done at this hospital in 1946. The following criteria were recorded:

Number of children
Woman's age
Doctor's name
Consultant's name
Reasons given for the operation

"The first criterion, the number of children, varied from one to eleven, the average being five. The ages of the women varied from twenty-one to forty-one, the average being twenty-six. The racial distribution was of no interest except that there were very few Japanese. The physician-who-attended-the-women category yielded no information of interest since it was obvious that the operation was not being performed any more frequently by one physician than by another.

"In the matter of consultation, several irregularities developed. In nine of the cases, there was no record of any consultation. In one of these nine, the attending physician signed the report as his own consultant. In forty-seven instances the reason given for the operation was multiparity which was borne out by the record and in many of these cases there was an additional indication of either economic, sociological, or medical nature, and many of the latter were very grave. In one case, the only reason given for performance of the operation on a para three was that further pregnancies would be dangerous. No reason was given as to why. One twenty year old woman had borne two illegitimate children and was said to be feeble-minded, but this was not given as a reason in the consultant's report. One para four woman was operated upon with no consultation and a note made on the chart indicated that the medical director had said that one was not needed. One twenty-five year old para four woman was operated upon with no consultation record and no reason was given, and the surgeon noted on the operative sheet that he disapproved of doing the operation.

"It does not appear that the practice of puerperal sterilization is being seriously abused at Hospital A. It is suggested, however, that more attention should be paid to the signing of the consultation sheet by the consultant and to the statement on this sheet of a definite reason for the performance of this operation. This is, of course, as much for the protection of the physician as it is for that of the hospital."

The matter of the continued high incidence of puerperal sterilizations was called to the attention of the medical executive committee in Hospital C but as yet no reply has been received.

The matter is presented for review at this time for reconsideration and re-evaluation. Do we have too many puerperal sterilizations, or not? If we are convinced that we do not, there is no object in reopening the matter from time to time. Quite obviously, the rule of having merely one consultant sign is not going to cause a decrease in the number of puerperal sterilizations. One school of thought in the Territory of Hawaii leans toward the opinion that this community is more progressive in its thinking than many others, and that it is desirable that we continue to do a relatively high number of sexual sterilizations.

With the same consultation rule in force in the three hospitals in Honolulu, why should there be an incidence of nearly five times as many puerperal sterilizations in the two general hospitals as in the specialized maternity hospital? No doubt there are several contributing factors. Among these may be mentioned the following: in the maternity hospital, there are three residents who ultimately plan to specialize in obstetrics and gynecology; and most of the cases are delivered by a small group with a high degree of obstetric specialization. Using January, 1947, figures, in Hospital B, 57 per cent of the deliveries were by specialists and in A and C 7.4 per cent and 29 per cent respectively were attended by specialists. A regular monthly staff meeting is held at the maternity institution, at which private as well as staff cases are presented and freely discussed. These factors may well contribute toward the constantly low figure for puerperal sterilization in the maternity hospital as compared with the general hospitals.

The class of maternity patients seems to play no part as all the institutions have patients of all economic brackets including indigents or semi-indigents.

Baer[1] has said in regard to sexual sterilization in Hawaii, "Unless your clientele is markedly different from the women we see in the States, the figures are certainly out of line with the best practice in this country." In additional correspondence Greenhill[2] has said, "Adding up all the indications which I consider proper, the incidence of puerperal sterilization operations should certainly not be higher than 2 per cent." In 1943 a survey[3] based on a questionnaire sent out by the Honolulu County Medical Society showed the following inci-

[1] Baer, J. L.: Personal communication.

[2] Greenhill, J. P.: Personal communication.

[3] Bowles, H. E.: Sexual Sterilization in Hawaii, Hawaii M. J. 4: 65-74 (Nov.-Dec.) 1943.

dence of puerperal sterilizations in the hospitals listed:

University of California Hospital	0.12%
University of Michigan Hospital	0.22%
University of Cincinnati Hospital	0.22%
Cook County Hospital	0.26%
Philadelphia Lying-In Hospital	0.49%
Sloane Maternity Hospital	0.6 %
Iowa State University Hospital	0.9 %
Chicago Lying-In Hospital	1.8 %

What, then, is the solution, if too many women are being sterilized in Honolulu hospitals? This was discussed in detail in three papers published in the HAWAII MEDICAL JOURNAL in 1944.[4] The following factors may well enter into the solution: (1) Vigorous enforcement of consultation rules with preference toward a balanced opinion of internist, psychiatrist, and obstetrician. (2) Definite and clear-cut indications for sterilization which are in accord wth the best standard of practice elsewhere. (3) Continued improvement in the quality of consultants. (4) Continued emphasis on control of population by a more thorough understanding of contraception whether by mechanical or chemical means, or by a clearer understanding of the physiology of ovulation and the fertility period. (5) Reservation of the operation of sexual sterilization for medical reasons only, this to include the "grand multipara," in whose case excessive multiparity, poverty, and malnutrition in themselves constitute medical indications.

In due fairness to a hospital and its administrative body, it must be apparent that the institution is responsible only in so far as to see that the existing rules are carried out. Once this is done, the burden of straightening out the matter is directly up to the medical profession.

[4] Bowles, H. E.: Sexual Sterilization: the Physician's Obligation to his Patient, Hawaii M. J. 3:65-66 (Nov.-Dec.) 1943. Irwin.[5] Shanahan.[6]

[5] Irwin, P. S.: Sterilization: Local Aspects of General Problem, Hawaii M. J. 4:75 (Nov.-Dec.) 1944.

[6] Shanahan, W.: Neuropsychiatric Aspects of Sterilization, Hawaii M. J. 4:76-77 (Nov.-Dec.) 1944.

Summary and Conclusions

1. Honolulu Hospitals A, B, and C have been the subject of study as to the incidence of puerperal sterilization in the years 1943 to 1946, inclusive.

2. In 1943 and 1944 a one-consultant rule was instituted. The consultant was picked by the patient's physician from the attending physicians in good standing in that hospital.

3. The incidence of puerperal sterilization was considered by many observers to be inordinately high in 1943. It was felt that consultation would reduce the incidence.

4. Despite the ruling, in A there was a temporary halving in the incidence of puerperal sterilization followed by a sharp rise in 1946 (see figures). In B the figures have remained at a constantly low level. In C they have remained at an almost constant high figure as compared with figures obtained from the mainland for 1943.

5. In an attempt to explain the wide discrepancy between A and C on the one hand and B on the other hand, the following figures stand out conspicuously. In B, 57 per cent of the deliveries were by specialists in obstetrics and gynecology. In A, 7.4 per cent of deliveries were by specialists, and in C, 29 per cent were by specialists. January, 1947, figures are given as it was considered a representative month.

6. On the basis of these figures it seems that the great bulk of puerperal sterilizations in Honolulu is not being done by specialists in obstetrics and gynecology.

7. Factors entering into a solution of the problem if too many puerperal sterilizations are being performed are discussed in next to the last paragraph of the foregoing.

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[EDITORIALS]

GASTRIC ULCER IS A SURGICAL DISEASE!

Every gastric ulcer is an early carcinoma of the stomach until it can be proven otherwise—and it can only be proven otherwise by careful histologic study of multiple sections.

This is a radical-sounding and unpalatable truth, but a truth none the less, which the medical profession is in the slow process of assimilating at the present time. The surgeons are assimilating it a little more rapidly than the internists, and the internists a little more rapidly than the psychiatrists; but no one seems to be assimilating it too readily, and hence it will bear a good deal of emphasis and repetition.

The situation is perfectly analogous to that of a solitary nodule within a breast. We all know what that means—cancer, until and if microscopic examination proves otherwise. No one would think of advising watchful waiting, or warm compresses, or anything except prompt excision.

But with gastric ulcer there is still a great tendency to "watchfully wait," and to employ medical treatment, despite the fact that there is no way on earth of selecting, at the beginning, the patients who will get well under such treatment, and the patients who will eventually die of inoperable carcinoma of the stomach.

We all know how helpless we are in the face of *established* cancer of the stomach. But if we excise every gastric ulcer, many of the cases that turn out to be carcinoma will have only beginning, *incipient* cancer of the stomach—which is no harder to cure by surgery than an early carcinoma of the lip.

So don't make a diagnosis of "gastric ulcer, benign," no matter what the criteria may be. Always call it "gastric ulcer, malignant?"—and let no one but the *pathologist* tell you that it is benign.

THE FOURTH CONGRESS OF THE PAN-PACIFIC SURGICAL ASSOCIATION

The Pan-Pacific Surgical Association began its fourth triennial congress as we went to press, on September 1. The 1942 and 1945 meetings were cancelled because of the war. This year the President of the Association was Dr. F. L. Reichert of Stanford University; the Vice-Presidents were Dr. J. B. Dawson of the University of Otago in Dunedin, New Zealand, and Dr. H. R. G. Poate of Sydney, Australia; and the Secretary-Treasurer was Dr. F. J. Pinkerton of Honolulu. The Council is made up of 10 physicians, 2 each from Australia, New Zealand, China, the mainland United States, and Hawaii.

Approximately a hundred surgeons, the great majority of them from the mainland United States, attended the numerous scientific sessions of the Congress, all of which were scheduled during morning hours. The afternoons were all left free for sightseeing, recreation and entertainment, both scheduled and free-lance.

A unique feature of the program, with which many mainland visitors were greatly impressed, was the holding of breakfast meetings at 7:30 a.m. These were held as round-table discussions, under the chairmanship of various local doctors.

The Territorial Medical Association may well take pride in the competent manner in which this meeting was planned and conducted by Dr. F. J. Pinkerton and the committee of 15 doctors who worked with him for many months; and much gratitude is due the many doctors, and doctors'

wives, who worked on various committees and made it possible for the delegates to have a good time, both professionally and socially.

PLAIN TALK FROM PAUL HAWLEY

Dr. Paul Hawley, who is currently Executive Director of the Blue Cross and Blue Shield Prepayment Plans, told a group of doctors in Chicago last summer that the attitude and actions of organized medicine during the past decade would certainly—if continued during the next three to five years—bring about socialization of medicine in the United States. The article, reprinted in *Medical Economics* for August, fairly crackles with such phrases as "the petty, selfish greed of a few physicians who would rather see the entire structure of American medicine wrecked than to concede one small, personal advantage to the general interest."

The decision in favor of socialization of medical services will be determined, he warns, not by reason but by emotion—emotion and votes. The number of organized groups demanding health prepayment plans is already huge, and is growing. And some of these groups—labor unions, in particular, will never be satisfied with anything short of uniform, nation-wide coverage for *all* members, and a single contract regardless of the number of medical care plans involved. Hawley is convinced —and he is in a position to know a great deal about it—that the present piecemeal county-by-county and state-by-state approach to the problem of health insurance is hopelessly futile.

A National Service Agency, Hawley believes, is the only answer to the problem of achieving nation-wide unification and extension of health insurance plans. He suggests the following concept of such an agency:

1. It would be controlled by a board of directors elected by participating Blue Shield plans.

2. It would underwrite medical care programs of national scope. It would pass on to each local plan the share of the business that lay within the area of that plan.

3. If any local plan desired to accept the entire risk of additional coverage offered in any contract, it would be free to do so. If, on the other hand, any local plan declined to carry the additional coverage demanded, the National Service Agency would carry the added risk. It would pay the local plan for all such services rendered.

4. The National Service Agency would work only through local plans. It would write no contracts that did not involve two or more plans. It would offer no contract of itself except in areas not covered by a Blue Shield plan.

5. The National Service Agency would have no control over any local plan, other than to see that agreements entered into with subscribers were carried out.

6. The existing organization of Associated Medical Care Plans would not be disturbed. The National Service Agency would be a separate underwriting organization, and not one of control.

It is Hawley's idea that this national agency will serve all the plans, and correlate them—not control them or regiment them. They will retain their autonomy of action under the new regime. Hawley disclaims vigorously — and again, he is in a position to know the facts — any intention whatever on the part of the Blue Cross Commission to gain any degree of control whatever over the practice of medicine. It is simply his considered opinion that medical prepayment insurance on a nation-wide and comprehensive basis is absolutely inevitable—and the only question is whether we will organize it ourselves, *now,* or wait until the Government does it for us. Non-participation, he warns, will never work; and he points to England as an example of its failure.

"LOOK" LOOKS AT LEPROSY AND AT DOCTORS

"I Was a 'Leper' " is the title of a two-page article in the August 31 issue of *Look*. It is the story of a former Carville patient, written by one of *Look's* staff. It is excellent, factual, educational —the sort of thing the medical profession should be doing, and isn't. There are a few shortcomings: the use of the word "leper," which both leprosy patients and leprologists object strongly to, is pretty free; emphasis on non-contagiousness is so strong that the relative susceptibility of children is—though mentioned—given too little emphasis. The punch line is a good one: "The biggest trouble with leprosy is *you.*"

Another article in this issue, entitled "What it Takes to Make a Doctor," tells approximately that, in five pages of illustrations and text describing the medical curriculum at Tulane. It is top-notch publicity for both Tulane in particular, and medical schools in general, and will undoubtedly have a good effect on the public relations of the entire medical profession.

Many medical articles in the lay press are published primarily because they make interesting, appealing reading. These two do that, but they go well beyond it. A lot of people are better off every time one person reads one of them.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 273rd regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on June 10, 1948. The meeting was called to order at 7:40 p.m. by the Vice President, Dr. Harold Sexton.

Those present were: Drs. W. Bergin, L. Bernstein, S. Brown, M. H. Chang, M. L. Chang, P. Chock, W. T. Chock, E. Cunningham, D. Depp, R. Fillmore, S. Haraguchi, V. Jim, S. Kasamoto, W. Leslie, W. Loo, R. Miyamoto, A. Orenstein, C. Phillips, H. Sexton, L. Sexton, W. Seymour, G. Tomoguchi, and T. Woo. Guests present were: Drs. F. Darrow and E. Teagarden.

Dr. R. S. Fillmore moved that the Delegates be instructed at the June 15, 1948, meeting in Honolulu that an assessment of $26.00 per member be submitted for referendum to the members of the Hawaii Territorial Medical Association. Seconded by Dr. E. B. Cunningham and carried.

The report of the Fee Schedule Committee presented by the Chairman, Dr. H. Sexton, was accepted. Dr. L. L. Sexton moved that the Delegates recommend the adoption of the Fee Schedule as submitted at the meeting of the House of Delegates. Seconded by Dr. D. Depp and carried unanimously.

Dr. L. Bernstein reported on repercussions resulting from the closing of the NAS child health conferences.

Dr. T. D. Woo moved that a Grievance Committee be formed consisting of the President, Vice President, Secretary, Treasurer and Councilor of the Society with the functions to include public relations, fee schedules, health and welfare. Seconded by Dr. W. L. Loo and carried unanimously.

The scientific session consisted of a lecture and the showing of lantern slides on the subject of "Head Injuries" by Dr. Ralph B. Cloward, Honolulu neurosurgeon.

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The 274th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on July 8, 1948. The meeting was called to order at 7:40 p.m. by the Vice President, Dr. Harold Sexton.

Those present were: Drs. W. N. Bergin, Leo Bernstein, S. R. Brown, M. H. Chang, H. E. Crawford, D. S. Depp, S. M. Haraguchi, V. Jim, S. Kasamoto, W. F. Leslie, R. M. Miyamoto, C. L. Phillips, H. M. Sexton, W. J. Seymour, G. Tomoguchi, F. Wong and T. D. Woo. Guest present was Dr. F. E. Darrow.

An application for membership from Dr. John T. Jenkin was referred to the Board of Censors.

The proposed Constitution and By-Laws prepared by the Constitution Committee to replace those lost in the tidal wave were read. Recommendations for changes were noted. The Secretary was instructed to provide each member with a copy of the Constitution and By-Laws and to notify the membership at least fifteen days before the next regular meeting that adoption of the proposed Constitution and By-Laws would be subject to referendum at that time.

The report of the Grievance Committee was presented by the Chairman, Dr. H. M. Sexton. A long discussion followed. The only action taken was in regard to the fee schedule for major procedures. It was moved by Dr. D. Depp, seconded by Dr. R. Miyamoto and carried unanimously, that the Society adopt the average fee schedule for major procedures in principle, that it be used as a guide and circulated among the physicians, and that the Grievance Committee continue to study this matter.

* * *

A special scientific meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on August 9, 1948. The meeting was called to order by the Vice President, Dr. H. Sexton, at 7:35 p.m.

Those present were: Drs. Leo Bernstein, S. R. Brown, M. H. Chang, M. L. Chang, Phillip Chock, W. T. Chock, E. B. Cunningham, D. S. Depp, R. T. Hata, V. Jim, S. Kasamoto, T. Kutsunai, W. Loo, A. Orenstein, T. Oto, C. L. Phillips, H. M. Sexton, L. L. Sexton, R. P. Wipperman, Francis Wong, T. D. Woo and H. B. Yuen. Guests present were Drs. F. E. Darrow and N. M. Azzato.

Dr. Sexton introduced Dr. Theodore Althausen, Professor of Medicine, University of California, who addressed the Society on the subject of "Abdominal Pain."

LEO BERNSTEIN, M.D.
Secretary

* * *

KAUAI COUNTY MEDICAL SOCIETY

The monthly meeting of the Kauai County Medical Society was called to order at 7:45 p.m. by President P. M. Cockett on May 12, 1948, at the Wilcox Memorial Hospital in Lihue.

Those present were: Drs. Bickell, Boyden, Brennecke, Chisholm, Cockett, Fujii, Goodhue, Ishii, Liu, Mason and Wade.

Drs. E. A. Bickell, C. H. Ishii and J. R. Mason were unanimously elected as members of the Kauai County Medical Society.

President Cockett brought to the attention of the members present that action should be taken on the cancer questionnaire. It was moved by Dr. Brennecke and seconded by Dr. Fujii that this questionnaire should be accepted as a form on all cases of cancer, which would be completed by the physician and the Territorial Board of Health nurse. This form is to be begun when the diagnosis of cancer is made. Dr. Cockett requested that the Secretary communicate with Dr. Quisenberry requesting more information on the cancer questionnaire and the possibility of establishing a cancer clinic on Kauai.

A copy of a letter by John M. Hendershot, Doctor of Veterinary Medicine on Kauai, to R. H. Morrison, President of the Hawaii Territorial Veterinary Medical Association in Honolulu, was read to the members.

It was unanimously approved by the members present that this copy should be forwarded to Dr. Palma, President of the Hawaii Territorial Medical Association, for further action.

Dr. Cockett spoke about the question of establishing a blood bank on Kauai and the willingness of the East Kauai Lions to aid in sponsoring this. It was moved by Dr. Brennecke and seconded by Dr. Wade that a committee be appointed to investigate the blood bank set-up. Dr. J. A. Mason was appointed as chairman of the Kauai blood bank by President Cockett.

The matter of contributions of patients who have had psychiatric consultations with Dr. Lynn was discussed. The members present agreed that the physician who requests the consultation should collect a fee compatible with the patient's income to be used for the purchase of psychiatric materials needed on Kauai.

Dr. Brennecke, the Kauai County Medical Society delegate to the Territorial Medical Association convention in Honolulu, reported on the discussions of Medical Economics, Government Physicians and fee schedules.

The question of the allocation of funds by the Territorial Board of Health to establish a laboratory on Kauai for the diagnosis of cancer was discussed. No action was taken, however.

* * *

The monthly meeting of the Kauai County Medical Society was called to order by President Cockett at 7:35 p.m. on June 9, 1948, at the Wilcox Memorial Hospital in Lihue, Kauai.

Members present were: Drs. Bickell, Brennecke, Cockett, Fujii, Goodhue, Ishii, Liu, Mason, Masunaga, Wade and Wallis. Dr. J. Boog was present as guest. Guest speaker for the evening was Mrs. Ruth Kam, Nutritionist for the Territorial Board of Health on Kauai.

After one correction, the minutes of the previous meeting were accepted as read. The correction was that the members of the East Kauai Lions Club would be available as blood donors for the community rather than aiding in sponsoring a blood bank on Kauai.

Dr. Brennecke moved that the Kauai County Medical Society go on record as supporting the establishment of a Cancer Diagnostic Clinic on Kauai. This Clinic would be staffed and financed by the Territorial Board of Health and its function would be cytological examinations of body cavity secretions to rule out malignancy. This motion was seconded by Dr. Bickell and passed unanimously. A further discussion to bring this matter before the next Territorial legislature requesting appropriations to support this plan was also passed unanimously.

Dr. Mason, Chairman of the Blood Bank Committee on Kauai, reported on the information he had so far obtained. The question of replacement of blood into the blood bank at periodic intervals, the amounts to be taken, the necessity of available donors, and the education of individuals in a public spirited enterprise, were discussed. No action was taken, pending a further discussion to be held at our next meeting.

The members of the Kauai County Medical Society moved that the Secretary communicate with Dr. V. A. Harl, who is now residing in Honolulu, concerning his desire to retain active membership and pay all accrued dues and assessments or whether he would prefer to be an inactive member.

President Cockett raised the question of donations by the people of Kauai for the forthcoming Community Cancer Drive. It was suggested that Kauai physicians aid further in this drive by enclosing pamphlets along with monthly statements explaining the necessity of contributions needed to combat and publicize the dangers of cancerous growths. Dr. Cockett urged all members to respond when called upon, to aid in this drive. The Society agreed that members when called would speak as individual physicians and not as representatives of the Kauai County Medical Society.

At the request of Mrs. Kam, Nutritionist for the Territorial Board of Health, the Kauai County Medical Society went on record as approving a series of electrical transcriptions sponsored by the Bureau of Health Education. These transcriptions, titled "Music With Your Meals," will be broadcast by the Kauai network.

Dr. Brennecke discussed the new Territorial Fee Schedule. Dr. Wade moved that the Kauai County Medical Society go on record as favoring the adoption of a uniform fee schedule. This was seconded by Dr. Wallis and unanimously carried.

An effort to organize a Woman's Auxiliary amongst the wives of the Kauai physicians was discussed.

A letter from Dr. Palma on the Medical Economics Assessment was read by Dr. Brennecke. Following a discussion, it was moved by Dr. Wallis that the Kauai County Medical Society instruct its Delegate to report to the Medical Economics Committee in Honolulu at its next meeting, that the members of this Society are behind this program and are in approval of the $40.00-$65.00 assessment. This was seconded and unanimously carried.

Mrs. Ruth Kam gave a very interesting and entertaining disquisition on the edibility and nutritiousness of Hawaiian fruits and plants.

* * *

The monthly meeting of the Kauai County Medical Society was called to order by President Cockett at 7:45 p.m. on July 14, 1948, at the Wilcox Memorial Hospital in Lihue, Kauai.

Members present were: Drs. Bickell, Cockett, Fujii, Goodhue, Mason, Masunaga and Wallis. Dr. Steuerman, resident physician at the Wilcox Memorial Hospital, was present as a guest.

Dr. Cockett thanked all the members for their active response during the recent Community Cancer Drive.

Dr. Mason, Chairman of the Blood Bank Committee on Kauai, reported on information obtained to date. It was moved by Dr. Wallis, seconded by Dr. Fujii and unanimously carried that the Chairman of the Blood Bank Committee draw up an outline of recommendations relating to the advantages and disadvantages of a professional blood donor list on Kauai, or the affiliation with the Honolulu Blood Bank. This will be discussed at our next meeting.

A letter from Mr. Joseph Couch, Administrative Officer in charge of the Federal Bureau of Intelligence Broadcasts, referring to physical examinations and chest x-rays of FBIB personnel on Kauai was discussed. It was moved, seconded and unanimously passed that the fee for a complete physical examination including serology and urinalysis would be $10.00. There will be an additional fee of $10.00 for each chest x-ray taken in the offices of the examining physician.

It was moved that the Kauai County Medical Society hold a dinner meeting at the Lihue Hotel on the second Wednesday in September 1948. Guest speaker for the evening would be either a Democratic or Republican party leader who would present his party platform and

inform the members concerning his stand on the social aspects of medical practice. A speaker of the opposing party would appear before the members at a subsequent meeting with a similar presentation. This was seconded and unanimously carried.

* * *

The monthly meeting of the Kauai County Medical Society was called to order by President Cockett at 8:50 p.m. on August 11, 1948, at the Wilcox Memorial Hospital in Lihue, Kauai.

Members present were: Drs. Bickell, Chisholm, Fujii, Cockett, Goodhue, Ishii, Kuhns, Mason, Masunaga, Wade, and Wallis. Guests present were: Dr. C. L. Wilbar, Jr., President of the Territorial Board of Health, and Dr. Steuerman, resident physician at the Wilcox Memorial Hospital.

Dr. Mason discussed the Blood Bank set-up on Kauai. Following this, there was a discussion and since the majority of the members were not in favor of affiliating with the Honolulu Blood Bank, the present method of obtaining blood on Kauai for transfusions will be continued.

A letter by Dr. Alvin V. Majoska of the Medical Services Advisory Committee of the Department of Public Welfare to Dr. Joseph Palma, President of the Hawaii Territorial Medical Association, was read. Dr. C. L. Wilbar, Jr., then explained his understanding of the contents of this letter and commented favorably on the interest taken by Dr. Majoska. No action was taken by the Society.

A letter from Dr. G. A. Batten of the Hawaii Cancer Society concerning the appointment of representatives from each of the outlying county societies was read. The Secretary will inform Dr. Batten that Dr. J. M. Kuhns of Lihue is the Chairman of the Kauai Cancer Committee.

Dr. Wallis reported on the Council meeting held in Honolulu in August, 1948. He informed the members as to finances of the Public Relations fund, the passage of the $26.00 assessment and the new fee schedule program.

Dr. Wallis also spoke on the question of Procurement and Assignment of physicians on Kauai and the establishing of a Territorial Committee which would be composed of five members of the Honolulu County Society and a member each from the component county societies. An election was held with Dr. Wade elected as Chairman and Dr. Kuhns as committee member.

Dr. Wade gave an interesting report on the A.M.A. convention which he attended in Chicago during the month of June.

A movie titled "Pre-Cancer Diagnosis of the Cervix by Cytology" was shown.

WILLIAM W. GOODHUE, M.D.
Secretary

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MAUI COUNTY MEDICAL SOCIETY

The June Dinner Meeting of the Maui County Medical Society was held at the Maui Grand Hotel on June 8 at 7:00 p.m. with Dr. Kanda presiding. Members present: Drs. Kanda, Sanders, Fleming, Shimokawa, Burden, Beland, St. Sure, Patterson, Haywood, Toney, Izumi, McArthur, Dunn, Kashiwa, Wong, Rockett, H. Kushi and Underwood. Visitor: Dr. McArthur of Portland, Oregon.

The minutes of the previous meeting were approved with the following additions: Cancer Committee—Drs. Cole, Fleming and Tofukuji; Grievance Committee—Drs. Dunn, Patterson and Izumi.

The following doctors were admitted to active membership in the Society: Dr. Guy S. Haywood by application and Dr. William Toney by transfer from the Kauai County Society.

A letter from Dr. Wilbar was read stating that a number of Maui doctors were reading their own chest x-rays taken on food handlers, etc. It was pointed out by Dr. Wilbar that Dr. Tompkins had been appointed by the County Society to read all such plates. It was decided to take no action on this matter until more information could be obtained on the health laws and pending Dr. Wilbar's visit to Maui in the near future.

Drs. McArthur and Toney were named by the President as advisors to the Maui Medical Society Woman's Auxiliary.

Dr. Patterson gave a summary of the activities of the Territorial House of Delegates.

a. There is now a 10-bed premature nursery at the St. Francis Hospital. Dr. Patterson suggested sending a nurse for special training in the care of prematures.

b. The problem of Child Health Conferences was discussed. It was decided that the doctor in charge should screen all patients and accept only those who could be classed as indigents.

c. The present method of paying government physicians was discussed and it was moved and passed that the present system be continued. The Kauai delegate dissented.

d. A summary of the talk given by Mr. Sills, the economics and public relations advisor to the AMA, was given.

It was moved by Dr. Sanders, seconded by Dr. Dunn, that the Society go on record as favoring the new fee schedule of the Territorial Association applying to all contractual relationships for medical care and that the Maui Delegates be instructed to vote in favor of the same. Motion passed.

It was moved by Dr. Dunn and seconded by Dr. Underwood, that the county society pay all expenses of delegates to territorial meetings. Motion carried.

It was moved by Dr. McArthur and seconded by Dr. Sanders, that the program committee chairman make arrangements to bring various specialists, as they are available, to Maui for medical conferences and that the society defray the expenses of such trips if necessary. Motion passed.

It was moved by Dr. McArthur and seconded by Dr. Patterson that each member of the society be assessed $60.00 for the use of the Economics Committee of the Territorial Association. Inasmuch as the Territorial Economics Committee has requested an assessment of $25.00, the secretary is to write to the committee informing them that the extra money is available in our treasury for their use if it is needed. Motion passed.

A copy of a letter written by Dr. Shapiro to the Franklin Insurance Co. concerning the present $5.00 insurance examination fee was read.

* * *

The July meeting of the Society was a Clinical Conference held at the Puunene Hospital July 8 at 6:00 p.m. Supper was served and a short business meeting followed before the meeting was turned over to the Chairman of the Program Committee, Dr. Patterson. Members present: Drs. Kanda, Dunn, Lightner, Underwood, McArthur, St. Sure, Patterson, Haywood, Sanders, Cole, Burden, Izumi, Wong, Shapiro, Kashiwa, Beland, Toney,

Ishikawa, H. Kushi, E. Kushi, Fleming, Tofukuji and Rockett. Visitor: Dr. Wong, Honolulu.

Dr. Kanda read a letter from the Junior Chamber of Commerce requesting sanction and kokua of the Medical Society in their efforts to establish a "living blood bank" on Maui. The secretary was instructed to write the Chamber assuring them of our support as long as it was kept as a Maui enterprise and no national or territorial agencies were involved. The following doctors were appointed as a committee to assist the chamber: Drs. Rockett, Beland, Haywood, Wong and Kashiwa.

A question as to the proper wording of Dr. McArthur's motion of the last meeting relative to a special assessment on the members for the use of the Economics Committee of the Territorial Association was brought up by several members. It was moved by Dr. Beland and passed that the question be tabled until the next business meeting.

Dr. Haywood presented and discussed several cases of gastro-intestinal surgery including two cases of choledocho-gastrostomy. The patients were presented and questioned on their subjective symptoms 2 months postoperative.

Dr. Haywood presented and discussed three cases of multiple fractures around the elbow with end results.

Dr. Underwood discussed the value of the electrocardiograph in diagnosis and showed a number of tracings.

Dr. Patterson discussed Dr. William B. Snow's "Calculator for Roentgen Cephalo-Pelvimetry, permitting a variable Target to Film Distance." A number of x-rays were presented showing the accuracy in determining the relation between the size of the mother's pelvis and the fetal head.

E. B. Underwood, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

Friday, July 9, 1948

Dr. Gotshalk presided; about 56 members and guests were present.

A welcome was extended to the dentists who came as guests of the Society.

The following doctors were welcomed into the Society: Dr. Teru Togasaki (a transfer from the Sacramento County Medical Society) and Dr. Sau Ki Wong (associated with Dr. E. S. Childs), a new member.

Dr. Kimi Nojima Yamaguchi has been transferred to non-resident membership status. She is now married and living in New Jersey.

At the last meeting of the Board of Governors, it was decided that the vice-president of the Honolulu County Medical Society be selected as an official representative of the Society to the Honolulu Chamber of Commerce, the dues to be paid for by the Honolulu County Medical Society for the period of his term in office.

Dr. Lyle Phillips gave a short resume of the latest results of the Better Business Bureau's program against medical rebates.

Dr. F. J. Halford brought the doctors up to date on the Pan Pacific Surgical Conference to be held August 30 through September 13.

The program consisted of the following presentations:

1. Delegate's Report—A.M.A.
   F. J. Pinkerton, M.D.
2. Medical Care Plans and Presidents' Conference
   Joseph Palma, M.D.
3. Politics and Labor—Their Effect on the Medical and Dental Profession
   Mr. James Blaisdell
4. Grass Roots Conference—County Level
   Alfred S. Hartwell, M.D.
5. Mainland Fee Schedules
   Steele F. Stewart, M.D.

Refreshments were served on the lanai after the meeting.

Friday, August 6, 1948

Dr. Gotshalk presided; 104 members and guests were present.

The program consisted of the following:

Movie: Pre-Cancer Diagnosis of Cervix by Cytology.
1. Report of Scientific Papers read at A.M.A.
   A. S. Hartwell, M.D.
2. Dermatological Highlights of a Mainland Trip (with Kodachrome slides)
   H. L. Arnold, Jr., M.D.
3. Latest Developments in the Diseases of the Chest
   Edmund Lee, M.D.
4. Specialism vs. General Practice
   Frode Jensen, M.D. (Asst. Professor of Medicine, University of Colorado)

The Chairman announced that Dr. Richard S. Dodge had been admitted to the Society as a regular member and Dr. Charles S. Judd as a service member.

Dr. Gotshalk stated that a revised plan for medical and hospital care under H.M.S.A. had been evolved to apply throughout the territory. Dr. Palma described the new features of the policy and it was discussed by the doctors present.

Action: On motion of Dr. Devereux, seconded by Dr. Richert, it was agreed that since the Board of Governors had studied the H.M.S.A. revisions carefully, the Society approved the plan presented by the medical members of the H.M.S.A. Board.

Dr. Robert B. Faus spoke about procurement and assignment. Each county medical society has already organized a Preparedness Committee to act in case of any emergency or disaster. With the selective service coming up, it is necessary now to have a committee authorized to take over the functions of procurement and assignment. Dr. Arnold, Jr., reported that the Council of the Territorial Medical Association had recommended a territorial committee composed of the existing five-member Preparedness Committee from Honolulu County plus the chairman of each county committee from the other islands. Dr. Robert Faus would be chairman of the territorial committee. The five alternates previously elected by the Honolulu Society would replace (in order of their election) the Honolulu members in case of absence.

Action: On motion of Dr. Arnold, Jr., duly seconded and passed, the Society voted that the Preparedness Committee already elected by the Honolulu Medical Society to serve in an emergency should be authorized to serve as a Procurement and Assignment Council.

The chairman reminded the doctors that registration ends September 2 and stated that it was the duty of every doctor and his wife to register and vote.

Samuel L. Yee, M.D.
Secretary

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RECENT ACQUISITIONS

Child Guidance

Abel, T. M. *The subnormal adolescent girl.* c1942. (from Bureau of Mental Hygiene)

Aichorn, August. *Wayward youth.* c1935. (from Bureau of Mental Hygiene)

Brown, Sanger. *The psychiatric study of problem children.* c1930. (from Bureau of Mental Hygiene)

Cox, P. W. L. *Guidance by the classroom teacher.* c1938. (from Bureau of Mental Hygiene)

Culbert, J. F. *The visiting teacher at work.* c1929. (from Bureau of Mental Hygiene)

Despert, J. L. *Emotional problems in children.* 1938. (from Bureau of Mental Hygiene)

Garrison, K. C. *The psychology of adolescence.* Rev. ed. c1940. (from Bureau of Mental Hygiene)

Garrison, K. C. *The psychology of exceptional children.* c1940. (from Bureau of Mental Hygiene)

Gesell, Arnold. *Infant and child in the culture of today.* c1943. (from Bureau of Mental Hygiene)

Institute for Juvenile Research. *Child guidance procedures.* c1937. (from Bureau of Mental Hygiene)

Meek, L. H. *Your child's development and guidance.* c1940. (from Bureau of Mental Hygiene)

Moodie, William. *The doctor and the difficult child.* c1940. (from Bureau of Mental Hygiene)

Sayles, M. B. *The problem child at home.* 1928. (from Bureau of Mental Hygiene)

Sayles, M. B. *The problem child in school.* 1925. (from Bureau of Mental Hygiene)

Thom, D. A. *Normal youth and its everyday problems.* c1932. (from Bureau of Mental Hygiene)

Wickman, E. K. *Children's behavior and teacher's attitudes.* c1928. (from Bureau of Mental Hygiene.

Wile, I. S. *The challenge of adolescence.* 1939. (from Bureau of Mental Hygiene)

Winn, R. B., ed. *Encyclopedia of child guidance.* c1943. (from Bureau of Mental Hygiene)

Zachry, C. B. *Emotion and conduct in adolescence.* c1940. (from Bureau of Mental Hygiene)

Circulatory System

Seegers, W. H. *Hemostatic agents.* c1948. (gift of publisher)

Willius, F. A. *A history of the heart and the circulation.* c1948. (gift of publisher)

Embryology

Levine, M. I. *The wonder of life.* c1940. (from Bureau of Mental Hygiene)

Strain, F. B. *Being born.* c1936. (from Bureau of Mental Hygiene)

Gynecology and Obstetrics

Hamblen, E. C. *Facts for childless couples.* c1942. (from Bureau of Mental Hygiene)

Smout, C. F. V. *Gynaecological and obstetrical anatomy.* 2nd ed. 1947.

Mental Hygiene

American Association for the Advancement of Science. *Mental health.* c1939. (from Bureau of Mental Hygiene)

Averill, L. A. *Mental hygiene for the classroom teacher.* c1939. (from Bureau of Mental Hygiene)

Bassett, Clara. *Mental hygiene in the community.* c1934. (from Bureau of Mental Hygiene)

Crothers, Bronson. *A pediatrician in search of mental hygiene.* c1937. (from Bureau of Mental Hygiene)

Deutsch, Albert. *The mentally ill in America.* c1937. (from Bureau of Mental Hygiene)

Fry, C. C. *Mental health in college.* c1942. (from Bureau of Mental Hygiene)

Griffin, J. D. M. *Mental hygiene.* c1940. (from Bureau of Mental Hygiene)

Groves, E. R. *Introduction to mental hygiene.* c1930 (from Bureau of Mental Hygiene)

Lee, P. R. *Mental hygiene and social work.* c1929. (from Bureau of Mental Hygiene)

Mackintosh, J. M. *The war and mental health in England.* c1944. (from Bureau of Mental Hygiene)

Ryan, W. C. *Mental health through education.* c1938. (from Bureau of Mental Hygiene)

Witty, P. A., ed. *Mental hygiene in modern education.* c1939. (from Bureau of Mental Hygiene)

Neurology

Bailey, Percival. *A classification of the tumors of the glioma group on a histogenetic basis with a correlated study of prognosis.* c1926. (gift of Dr. M. Gerundo)

McDonald, J. J. *Correlative neuroanatomy.* 4th ed. rev. c1947. (gift of publisher)

Weil, Arthur. *A textbook of neuropathology.* c1933. (gift of Dr. M. Gerundo)

Pediatrics

Child Study Association of America. *Parent's questions.* c1936. (from Bureau of Mental Hygiene)

de Schweinitz, Karl. *Growing up.* 2nd ed. rev. c1935. (from Bureau of Mental Hygiene)

Fisher, D. C., ed. *Our children.* c1932. (from Bureau of Mental Hygiene)

Gesell, Arnold. *The first five years of life.* c1940. (from Bureau of Mental Hygiene)

Isaacs, Susan. *The nursery years.* 1938. (from Bureau of Mental Hygiene)

Orton, S. T. *Reading, writing and speech problems in children.* c1937. (from Bureau of Mental Hygiene)

Psychopathology

Angyal, Andras. *Foundations for a science of personality.* c1941. (from Bureau of Mental Hygiene)

Blanton, Smiley. *For stutterers.* c1936. (from Bureau of Mental Hygiene)

Bowlby, John. *Personality and mental illness.* 1942. (from Bureau of Mental Hygiene)

Brickner, R. M. *Is Germany incurable?* c1943. (from Bureau of Mental Hygiene)

Committee of the National Research Council. *Psychology for the fighting man.* c1943. (from Bureau of Mental Hygiene)

Dubois, Paul. *The psychic treatment of nervous disorders.* c1905. (from Bureau of Mental Hygiene)

Freud, Anna. *War and children.* c1943. (from Bureau of Mental Hygiene)

Gillespie, R. D. *Psychological effects of war on citizen and soldier.* c1942. (from Bureau of Mental Hygiene)

Korzybski, Alfred. *Science and sanity.* 2nd ed. c1941. (from Bureau of Mental Hygiene)

Levine, Maurice. *Psychotherapy in medical practice.* c1942. (from Bureau of Mental Hygiene)

Menninger, K. A. *Man against himself.* c1938. (from Bureau of Mental Hygiene)

Prescott, D. A., ed. *Emotion and the educative process.* c1938. (from Bureau of Mental Hygiene)

The psychoanalytic study of the child. v. 1. c1945. (from Bureau of Mental Hygiene)

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BOOK REVIEWS

Successful Marriage. Edited by Morris Fishbein, M.D., and Ernest W. Burgess, Ph.D. 547 pp. Price $7.50. Doubleday & Company, Inc., New York, 1947.

"Successful Marriage" is one of the best treatises which has been published in recent years and is one of the most thorough. The book contains a series of expert lectures by nationally and internationally known authorities. Among those subjects which are admirably covered and make the book stand out are those dealing with preparation for marriage, the fertility period, psychological adjustments between husband and wife, and behavior problems for the adolescent. The facts and fallacies of heredity are explained clearly. Problems of adoption are included.

Although written by experts in the field, the language is clear enough so the average young adult with a high school education should be able to understand the context. This book can be recommended without hesitation to prospective brides and grooms and should be a part of the library of every family.

H. E. Bowles, M.D.

Medical Clinics of North America, Symposium on Psychiatry and Neurology. pp. 555-853. $16.00 per year. W. B. Saunders and Company, Philadelphia. July, 1948.

The July 1948 number of *Medical Clinics of North America* brings to the practitioner of general medicine much information in the field of neurology and psychiatry without, as pointed out in the foreword, the condescension by the specialist to the general practitioner. Every physician at one time or another will have contact with psychiatric problems, and this edition affords a valuable review of those conditions which the physician without specialized training may be called upon to see.

The section on schizophrenia is especially good, pointing out, as it does, that the schizophrenic reactions are primarily disorders of thought, and that such reactions may mimic neuroses or other psychoses without presenting frank delusional and hallucinatory material. In an article devoted to psychiatric orientation for the general practitioner the point is well taken, and deserves reemphasis, that the tendency to avoid the diagnosis of an emotional disorder, giving placebos as necessary (although the latter may afford relief temporarily through the medium of strong suggestion) usually leads only to the development of new symptoms which may be even more refractory to treatment than the original symptoms.

The reviewer read with interest a section entitled "Electroshock Therapy in an Outpatient Setting," in which the author advised the use of electroconvulsive therapy in the home or office when indicated, because of the obvious advantage to the patient of not being committed to a mental institution. Certainly, outpatient electroconvulsive therapy is not indicated when

(1) There is not adequate supervision in the home (which means twenty-four hour care in the cases of psychotic or depressed patients), and

(2) Proper precautions cannot be taken during administration of the treatment.

It may be interesting to note in passing that the Group for the Advancement of Psychiatry several months ago went on record as disapproving of the use of electroconvulsive therapy in the home or office.

Again in the words of Dr. Wechsler's foreword, it is difficult to single out those sections of superior merit. All are informative, all are good, many very good. One may profit much by reading the volume.

Clifton C. Rhead, M.D.

Handbook of Ophthalmology. By Dr. Everett L. Goar. 170 pp. 48 illustrations. Price $5.50. The C. V. Mosby Company, St. Louis, 1948.

Dr. Goar's Handbook of Ophthalmology is a ready reference for junior medical students and physicians studying for state board examinations. In 170 pages the book covers the highlights of ophthalmology starting with a brief historical resume, through anatomy, embryology, methods of examination, diseases of the eye, medical ophthalmology, and a short chapter on ocular therapeutics.

A book of this scope obviously cannot be expected to delve into too much detail. Yet the inclusion of a few additional specific instructions would, in the reviewer's opinion, better prepare the medical student for handling the various disorders of the eye. For instance: the author, in discussing the treatment of corneal ulcers, does not mention the use of chemical cautery, mydriatics, heat, antiseptics, antibiotics or patching of the eye. In discussing the treatment of cataracts the student is left with the impression that all cataractous lenses have to be operated upon. No mention is made of the use of eye-glasses, weak mydriatic solutions, and optical iridectomy. Under the discussion of glaucoma, some indication of the percentage strengths of the miotics commonly used would have seemed desirable.

The 48 illustrations and the seven color plates are excellent, and for the most part appear to be well chosen from recognized authorities.

William John Holmes, M.D.

The Acute Bacterial Diseases—Their Diagnosis and Treatment. By Harry F. Dowling, M.D., F.A.C.P. 465 pp. with 55 figures. W. B. Saunders Co., Philadelphia and London, 1948. Price $6.50.

Dr. Dowling has brought under one cover a treatise on all the more common bacterial diseases seen in practice. It represents an experience with over seven thousand patients with these diseases and so is authoritative. The study is more comprehensive than the usual medical textbook and combines much subject matter that one usually has to consult several books to find. Considerable laboratory procedure is included, especially procedures that are necessary for proper diagnosis. Methods of treatments are well covered and include the use of antibiotics and chemotherapy as well as older bedside treatment that are so important for the comfort of patients.

The bibliography is extensive and useful. Isolation units should find the book very helpful and it is recommended heartily to all physicians.

JOHN BELL, M.D.

Man, Weather, Sun. By William F. Petersen, M.D. 464 pp. Price $10.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1948.

Everyone knows, instinctively, that the weather does something to us humans, physiologically and, too often, pathologically, yet few of us know just what that something is. Petersen knows. He tells about it in this book. It is far from guesswork or old wives' tales. Much of it consists of very accurate, broad and complex data.

He was fortunate in having triplets, three medical students, under his constant observation and investigation over a period of a month and a half, during which time the weather was accurately observed. This was in Chicago, where the weather bounces around and would be apt to do things to the triplets, two of them homozygotes and one heterozygote.

If you look at the protocols of the triplet study you will be amazed at the many details, and you will wonder that these human guinea pigs were not bled white by the end of the experiment.

All these data and their variations Petersen hooks up with meteorographs of his own designing which may dismay the casual reader, but which are necessary to the real student of the effect of weather on man because they present all the details. Thus Petersen shows that his triplets respond in rhythmic fashion to weather changes in a consistent fashion, and correct—or overcorrect.

If the casual reader can hurdle the complex preliminary meteorograms, he will arrive at the more entertaining portion of the book in which Petersen shows that the population of Chicago, as a whole, was reacting in much the same fashion as the triplets. Petersen will probably convince the reader that the weather has a great deal to do with precipitating psychopathic incidents, births, deaths, suicides, and may even convince the reader that the weather has a direct effect on the sex ratio of conceptions. From thereon, Petersen becomes less factual and more philosophical, and the reading becomes less difficult and much more pleasurable. A review of history in the light of weather and sun spots is a fascinating subject, and may help clarify the present-day world's deplorable situation.

He begins his last chapter thus: "If mass man is conditioned by weather and weather is conditioned by the sun, then the sun is master of our destiny. And master of individual destiny, too, though obviously modified by greater or lesser susceptibility of the individual to the impact of the environment."

This book was written primarily for physicians but any intelligent layman can understand, with profit, the greater part of the book. Incidentally, it was dedicated to a physician of Honolulu, whose natives have no word for weather.

E. A. FENNEL, M.D.

A History of the Heart and the Circulation. By Fredrick A. Willius, M.D., M.S. in Med. and Thomas J. Dry, M.A., M.B., CH.B., M.S. in Med. 456 pp. Price $8.00. W. B. Saunders Company, Philadelphia and London, 1948.

In a very clear and concise manner, the important contributions to diseases of the heart and circulatory system are set down in an "easy to read" chronological order by the authors. The separation into the various eras, such as Mediaeval, Renaissance, and then by centuries, through the first quarter of the Twentieth Century, clarifies the reader on the important advances contributed by the various scientists as well as the periods in which they lived. The second part of the book concerns itself with a little more biographical data on each of the several most important men from Hippocrates through Sir Thomas Lewis. Following this, there is a condensed diary of events which occurred in each of the necessary studies of the heart and circulatory system, such as electrocardiograms, cardiac arrhythmia, tachycardia, etc.

Along with "Cardiac Classics" this volume will fill a much needed spot in the library of any one interested in medicine. The information is at once interesting and pertinent.

In the light of our present-day physical instruments for research, it should make every physician humble to realize that accurate descriptions of many diseases were made two and three centuries ago and some longer than that, and to this date very little additional data are available.

It is rare indeed for such a mass of information to be concentrated in a precise manner as is found in this important history.

MORTON E. BERK, M.D.

Medical Clinics of North America: Symposium on Anomalies of the Heart. Mayo Clinic Number. Pages 855-1158. Price $18.00 a year. W. B. Saunders Company, Philadelphia and London, 1948.

These five articles from the Mayo Clinic constitute a good review of congenital cardiovascular defects for those interested in the subject. There are several thoughts brought out which are relatively new, and thus bear emphasis.

Robert L. Parker, in his discussion of pulmonary stenosis with Tetralogy of Fallot, attempts to evaluate the ultimate effect of its recent surgical treatment. He suggests that producing an artificial ductus equalizes the work load of the ventricles. Whereas the right ventricle had the greater strain prior to surgery, the creation of the anastomosis increases relatively the work of the left ventricle. The increase in peripheral oxygen supply, however, it is hoped will decrease the total strain on the heart. More time and evaluation of cases operated upon will be needed to decide this question.

James W. DuShane presents four uncommon cardiac anomalies accompanied by cyanosis. These are discussed in a thoughtful manner. The reviewer is in agreement with the statement that cardiac murmurs are of no aid in differentiating these anomalies during infancy.

Thomas J. Dry presents five cases of atrial septal defects. He states that atrial defects are more often associated with auricular fibrillation than any other congenital cardiac defect. He stresses the difficulty of prognosis whether due to congestive failure or infection.

Howard B. Burchell states that to carry out a study of the patent ductus arteriosus from the stage of embryological development through the late pathological changes would prepare one most thoroughly for most problems in cardiology. One of his interesting comments is, "As a commentary on the effect of tradition in medicine, it is odd that there is a tendency to use cyanosis as a clinical indication of subnormal arterial hemogoblin unsaturation in congenital heart disease in spite of the fact that the unreliability of blueness as an indication of arterial hypoxemia has been emphasized to hundreds of flight surgeons and thousands of flying personnel."

Jessie E. Edwards includes some excellent diagrams of anomalies of the derivatives of the aortic arch system which may cause symptoms and later death by pressure on the respiratory tree or the esophagus. He uses the functioning double aortic arch as the basic pattern for describing these anomalies and points out the importance of recognizing these anomalies because surgical division of one of the vessels causing the pressure will cure the condition. The particular vessel to be divided varies in different cases. Sometimes it will be the ductus arteriosus and other times the subclavian artery or the smaller of one of the two aortic arches. Study of the drawings is necessary to understand these factors.

ALFRED S. HARTWELL, M.D.

Correlative Neuroanatomy. By Joseph J. McDonald, M.S., M.Sc.D., M.D.; Joseph G. Chusid, A.B., M.D.; Jack Lange, M.S., M.D. Fourth Edition, Revised. 156 pp. with 60 illustrations. Price $3.00. University Medical Publishers, Palo Alto, California, 1948.

A very compenhensive compendium of neuroanatomy, embodying the physiology, pathology, and the differential diagnosis of the various forms of clinical nervous diseases. It serves as an excellent book for students and those who are preparing for examinations. For the average practitioner, who wants a clear and immediate reference to his case, he will find it very useful and helpful. The entire book is presented in a schematic form with the subjects, sub-headings and all important information underlined, so that one can follow the outline very readily and easily.

This edition is brought up-to-date with all the advances in neuroanatomy and neurophysiology. Of particular interest is the section on electroencephalography, describing the technique and interpretation of the various tracings with illustrations.

For those who are interested in this field, I consider it a valuable guide and a refreshing synopsis of the entire subject of neurology, particularly when the correlation of such a difficult subject is presented in so simple and pleasing a form.

M. F. CHUNG, M.D.

Hemostatic Agents. By Walter H. Seegers, M.S., Ph.D., and Elwood A. Sharp, M.D., Sc.D. 131 pp. Price $4.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1948.

Complete coverage of a very narrow subject is offered in this thin volume. It is a valuable primer on the rationale of the recently developed hemostatics: thrombin, fibrinogen, oxidized cellulose, fibrin foam, and gelatin sponge. The clinical applications of these substances are thoroughly summarized and should be of interest to surgeons. A valuable review of the basic mechanisms involved in the clotting of blood is presented, but is somewhat spoiled for the general reader by many pages of detailed laboratory findings which can be of interest only to a biochemist.

This book contains only 97 pages but reviews the literature on hemostatics so exhaustively (370 references) that it should serve as an excellent source book for anyone interested in wider reading in this field.

C. A. DOMZALSKI, JR., M.D.

Clinical Laboratory Methods and Diagnosis. By R. B. H. Gradwohl, M.D., D.Sc., F.R.S.T.M. & H. (London). Fourth Edition. Three Volumes. 3264 pp. with 1100 illustrations, 58 color plates. Price $40.00 complete. The C. V. Mosby Company, St. Louis, 1948.

Forty bucks is a lot of money in anyone's language, particularly in the jargon of the poor laboratory director or the even poorer medical technologist. But to the latter two this expenditure is worth while; it is even almost mandatory.

These three impressive volumes are no buy for the general practitioner nor the rotating intern (unless he has laboratory leanings). But it is a good buy for most hospital laboratories and private laboratories as well.

Gradwohl does not get along well with the American Society of Clinical Pathologists, because he heads a school for medical technologists on a commercial basis (as medical colleges were run fifty to a hundred years ago); but I'll bet most of the members of the American Society of Clinical Pathologists will have this set of volumes on their shelves, if for no other reason than to find its shortcomings.

An intensive acquaintance with the third edition convinced me that it was compiled by a practical technician —who does things with his own lily white fingers—and a rapid leafing through these three new volumes convinces me that he continues to be very practical and accurate.

Looking at these three fat volumes, one gets goose pimples when one remembers that medical technologists are supposed to know what is in all these 3,264 pages. But, at least, they should know where to look up a required technique. For that reason I wish that Gradwohl had issued a slim fourth volume, an index to the three texts. Volume III is devoted to tropical medicine and was written in collaboration with Kouri of Havana, and carries its own index, which is awkward; Volume II carries the index to the other two.

The third edition was an excellent working tool in the laboratory; ours is pretty frayed, dog-eared and annotated; this fourth edition, casually, seems even better, by the addition of the very many techniques developed in the past few years. Whether the deletions were as adequate as the additions remains for my further detailed study.

That the author has included a number of techniques originated by me does not influence my thought in his behalf. As a matter of fact, he includes one that I am sorry I ever consigned to paper.

Forty bucks is a lot of money—but I am going to buy the set.

ERIC A. FENNEL, M.D.

NOTES AND NEWS

Personals

QUEEN'S HOSPITAL announces the arrival in October of a new interne, Dr. Wallace E. Chin of Honolulu, a graduate of the College of Medical Evangelists in the class of 1948, and a new resident in internal medicine, Dr. Chew Mung Lum, also of Honolulu, a graduate of Northwestern in the class of 1947. Dr. Lum interned at the Wesley Memorial Hospital in Chicago.

Dr. John Milford, a graduate of Yale University Medical School, has become associated in the practice of medicine with DR. EDGAR CHILDS.

DR. GILBERT C. FREEMAN has returned from the mainland with his family to resume his association with the surgery department of The Clinic. While on the mainland he successfully completed the first part of the examination of the American Board of Surgery and visited his home in New Jersey.

DR. ROBERT DORSEN has left the Territory for reassignment with the U.S.P.H.S. in Galveston, Texas. He has been replaced here by Dr. Walter C. Clowers, who has spent the past two years at the U. S. Marine Hospital in San Francisco.

DR. C. T. LIU recently returned from the mainland after nine years' absence. He has recently completed a post-graduate period of study in neuro-surgery at the University of Pennsylvania. He plans to specialize in neurology and neuro-surgery.

DR. RICHARD DURANT has opened an office in the Young Building for the practice of general surgery.

DR. JOSEPH E. STRODE was elected to membership in the American Surgical Association at their annual meeting in Quebec last summer. He is the only surgeon from Hawaii ever to be honored in this way. The organization consists of less than 200 American surgeons.

DR. CLARENCE J. KUSUNOKI has returned to Honolulu to open his office for the practice of otolaryngology and broncho-esophagoscopy. He recently completed a three-year course of training in these fields at the Washington University Medical School in St. Louis.

DR. CLIFTON C. RHEAD, JR., was married in July to Miss Phyllis E. Smetana, daughter of Mr. and Mrs. Joseph Smetana of Baltimore.

DR. MARY BETH GODFREY of Des Moines has joined the medical staff of Kalaupapa Settlement. She is a graduate of the University of Iowa in 1944.

DR. TETSUI WATANABE has been certified in roentgenology by the American Board of Radiology.

DR. RICHARD S. DODGE has become associated with DR. R. NELSON HATT in the practice of orthopedic surgery. They have offices in the Dillingham Building.

DR. ERNESTINE KANDEL HAMRE has left Honolulu for an absence of a year, during which she will be associated with the Mayo Clinic, where her husband, Dr. Christopher J. Hamre, Professor of Zoology at the University of Hawaii, has been appointed to the staff of the Mayo Foundation to do research work on the physiology of the blood.

DR. HOMER IZUMI has left Honolulu for six months' post-graduate study, in part at the Cook County Hospital, in Chicago. His practice will be conducted in his absence by Dr. DORIAN PASKOWITZ, who was graduated from Stanford University.

DR. K. OKAZAKI recently completed a year of post-graduate study in gastroenterology at the University of Pennsylvania Graduate School of Medicine.

DR. JOHN PEYTON, formerly of Cincinnati, arrived in Honolulu recently with Mrs. Peyton, and has become associated with The Medical Group in the practice of pediatrics.

DR. CYRUS LOO recently returned to Honolulu, having completed his graduate training in dermatology and syphilology at the University of Virginia. Dr. Loo is certified by the American Board of Dermatology and Syphilology.

DR. FRANCIS Y. K. LAU was married in June to Miss Bernita Marie Anderson of Anoka, Minnesota. Dr. Lau is in the U. S. Army Medical Corps and is stationed at Tripler General Hospital.

DR. HASTINGS H. WALKER, Director of Leahi Hospital, returned late in August from an extended mainland trip with his son David.

DR. SAMUEL D. ALLISON, formerly associated with the Territorial Department of Health, has recently opened an office in the Young Hotel Building for the private practice of dermatology and syphilology. Dr. Allison was absent from the Territory for fourteen months during which time he studied at New York University-Bellevue Hospital and completed his training for specialty board examinations in dermatology and syphilology. In addition he spent several months as assistant to Dr. Howard Fox in New York. He also did some research work at Columbia University School of Public Health and Vanderbilt Clinic. Dr. Allison had had previous training in dermatology and syphilology at the University of Oregon Medical School and at John Hopkins.

Kauai

DR. AND MRS. J. M. KUHNS vacationed on the west coast, visited St. Louis, Missouri, and then flew to Alaska during the month of June.

DR. J. BOOG of the Bureau of Maternal Health visited Kauai in June.

DR. AND MRS. WEBSTER BOYDEN of Koloa and son, Blaine, left for the west coast early in September for a vacation. Blaine will go to Dartmouth.

DR. C. L. WILBAR, JR., President of the Territorial Board of Health, visited Kauai on August 9, 10, 11, 1948.

DR. BURT O. WADE of Waimea attended the AMA convention in Chicago in June 1948.

DR. D. R. CHISHOLM, Medical Director of the Samuel Mahelona Memorial Hospital, was appointed as acting Health Officer for the island of Kauai.

DR. AND MRS. P. M. COCKETT of Kealia attended the Pan-Pacific Surgical Convention held in Honolulu.

DR. SAMUEL HARVEY of New Haven, Conn., spent several days on Kauai as guest of DR. and MRS. S. R. WALLIS of Lihue.

Hilo

DR. FRANCIS F. C. WONG opened his office in Hilo for the practice of medicine and surgery. He was previously associated with DR. T. KUTSUNAI in the same city.

ORGANIZATIONS

Honolulu Surgical Society

At the last meeting of the Society in August, Dr. Emil Goetsch, Professor of Surgery at the Long Island Medical College in New York, was the guest speaker. Dr. Joseph E. Strode was succeeded as President of the Society by Dr. Rogers Lee Hill; Dr. Laurence Wiig was re-elected Secretary-Treasurer.

Honolulu Academy of General Practice

Dr. Frank Spencer addressed the Academy at its meeting in August on The Toxemias of Pregnancy from the Standpoint of the General Practitioner. Dr. Howard Liljestrand also spoke; his subject was General Practitioners' Fees.

Honolulu Obstetrical and Gynecological Society

Dr. E. Lee Dorsett, of St. Louis, Missouri, addressed the Society at its August meeting on the subject of re-operations. His talk was based on a study of 300 gynecological cases.

Dr. Frank C. Spencer has been elected president of the Honolulu Obstetrical and Gynecological Society. Dr. K. S. Tom is vice president and Dr. H. M. Patterson is secretary-treasurer. The Society welcomes all doctors interested in obstetrics and gynecology. The dues are five dollars.

Hawaii Cancer Society

The newly inaugurated Hawaii Cancer Society recently concluded its initial membership and fund-raising campaign with proceeds totaling approximately $75,000, and is embarking on a program of cancer education and case study. The first move has been to finance a program of cancer education to be conducted by the Department of Public Instruction and the second to conduct, in cooperation with the Pan-Pacific Surgical Congress, a public lecture on cancer given by Dr. Lehman, President of the American Cancer Society; Dr. O. T. Clagett of the Mayo Clinic, and Dr. Chauncey Leake of the University of Texas.

TRIPLER GENERAL HOSPITAL OPENED

On September 10 were held the official opening ceremonies for the Army's recently completed Tripler General Hospital. The ceremonies were attended by many senior medical officers of the Army, Navy, and Air Force, and by guests from the Pan-Pacific Surgical Congress.

NOTICE

Space no longer permits the publication of the "Items of Possible Interest to Friends of Chauncey D. Leake." Those who are interested in keeping up with these comments on current literature—medical and otherwise—may write to Dr. Chauncey D. Leake at The University of Texas, Medical Branch, Galveston, Texas, and ask to be placed on his mailing list.

NECROLOGY

Dr. Frank A. St. Sure, Sr., of Hamakuapoko, Maui, died on June 22 of this year at the age of 74. Dr. St. Sure had practiced medicine in the Territory for 43 years. He is survived by Mrs. St. Sure and by five sons, one of whom, Dr. Frank A. St. Sure, Jr., is a physician.

Dr. Arthur C. Rothrock, of Paia, Maui, died on August 9, at the age of 62. He had been resident physician of Paia Hospital for 32 years. He is survived by a daughter.

Hawaii Medical Service Association

Medical and Hospital Care



Blue Shield Plan
For Hawaii

Sept. 1, 1948

Dear Doctor:

In appreciation of your support and participation in HMSA, the Association now extends to *you* and *your employees* the following benefits at the low *group rate* without group enrollment requirements.

Plan I—Medical, Surgical, Hospital benefits.

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The previous income limitation of $500 has been removed and you are now eligible to enroll under any of the three plans above.

This offer includes the enrollment of eligible dependents (spouse and unmarried children over one year and under 19 years of age).

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

COMMITTEE

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Reports for Seventeenth Annual Meeting
Nurses' Association, Territory of Hawaii

REPORT OF THE PRESIDENT

The national nursing organizations chose for their theme this year at the biennial convention "America's Nursing Care: A Professional Challenge and a Public Responsibility!" The question I should like to bring before you here is: "What does this professional challenge involve, and is the Nurses' Association, Territory of Hawaii, recognizing and preparing to meet it?"

Adequate, quality nursing care, available to all the people, depends upon many factors and many people. It depends upon the desire of capable, intelligent women to enter the profession, the kind of preparation they get for the responsibilities demanded of them, and the satisfaction they derive from practicing their profession. It depends upon the community's willingness to set up facilities to make good care possible and the public's ability to provide funds for the care of those unable to pay for illness and preventive care. It involves the physicians who order care, the hospital administrators who supervise the physical facilities, and the public and the patients who pay the bills, as well as the nurses who give the actual care or teach others to do it.

What is this challenge to the Nurses' Association, the organization through which the profession acts? I believe it is this:

First, to inform the public, especially parents, educators and students, what the profession offers the girl who enters it. This falls within the functions of the League of Nursing Education and the Public Relations Committee.

Second, to seek to obtain for those practicing the profession, working conditions which make it possible for them to give the best service and at the same time be wholesome, happy, contributing citizens of the community. Our Wages, Hours & Personnel Practice Committee is taking the first step, i.e., to survey practices and determine what such working conditions should be for the Territory.

Third, to promote standards and practices of nursing education which will properly prepare a sufficient number of suitable people to meet the total needs of nursing care. This includes both professional and practical nurses. Here we expect to be guided by and to cooperate with the League of Nursing Education and the Board for Licensing of Nurses.

Fourth, to develop placement and counselling facilities so that those properly qualified may be placed in the positions which they can fill to their own and the employers' best satisfaction. This is one of our weakest programs and involves reorganization and expansion of the present nursing service.

Fifth, to demonstrate and interpret quality nursing to the public so that provision will be made for the education of nurses and for the funds to employ the needed number under conditions which makes good nursing care possible. Reports will show that the public readily responded to the call for help in providing a training program for practical nurses when it was explained. The Oahu Health Council is now promoting legislation to subsidize nursing education and increase the number of public health nurses.

As you hear reports from committees and members who represent us in other community organizations you will realize that the Nurses' Association, Territory of Hawaii, is making an effort to meet the challenge and to become a dynamic force in the community. To be able to carry on this effort, however, we must have a larger proportion of the licensed nurses in the Territory actively participating members of the Association. While the Membership Committee has brought about remarkable gains in membership this year, still only about one-half of the nurses registered in the Territory are members.

We must find a way to send more members to meetings and conferences on the mainland and to bring here the people who can help us evaluate and improve our services.

Above all, we must find a way to bring together in community planning for medical and nursing care, all those whose responsibility it is to provide adequate

nursing care for all the people at a price they can pay.

To those of you who have worked so diligently and productively the last two years, I want to say that the things you have done have built sound foundations for the promising future of nursing in Hawaii and that the years ahead will need your leadership. As president, I thank you all.

VIRGINIA JONES, *President*

REPORT OF THE SECRETARY

Since the last annual meeting the Board of Directors have held a total of 8 meetings, 6 of which were regular and 2 special meetings. The average attendance at each meeting was 9 members. Representation from at least one of the outside islands was usual at each meeting; at one meeting all three outside districts were represented.

It is with pleasure that we now announce the appointment of a full time office secretary at the Mabel Smyth Memorial Building, effective as of June 1, 1948. Mrs. Laura Wright is employed jointly by the Territorial Nurses' Association, City and County Nurses' Association of Honolulu, and the Territorial Board of the Licensing of Nurses. Her office is next to the Nurses' Registry. The malihini nurses as well as all members of the district associations can now feel free to drop by the nurses' headquarters at any time and find someone to whom they may direct their queries.

The Territorial Association is actively cooperating with local community agencies by having representation on the following groups: The Oahu Health Council, The Medical Service Advisory Committee of the Department of Public Welfare, The Emergency Advisory Committee of the Hawaii Chapter for Infantile Paralysis, The Department of Public Instruction Training Program for Practical Nurses, Public Affairs Committee of Council of Social Agencies; Scholarship Committee of Hawaii Chapter for Infantile Paralysis; Hawaii Chapter Red Cross Nursing Committee.

Delegates have attended the following mainland conventions: International Congress of Nurses held in Atlantic City, New Jersey, May 1947; Conference of Secretaries of State Boards of Nurse Examiners, Seattle, Washington, September 1947; League of Nursing Education, September 1947; American Nurses' Association, Structure Study, Chicago, Illinois, September 1947; American Nurses' Association Conference on Economic Security for Staff Nurses, San Francisco, California, April 1948; and American Nurses' Association, Conference for Chairman of Public Relations Committee, New York City, June 1948.

The Board of Directors voted in October 1947 to dissolve the Education Committee with the recommendation that hereafter all educational problems be directed to the League of Nursing Education.

In conclusion, to each of you present at this convention, may you find your visits together valuable, stimulating and friendly.

OLGA LARSON, *Secretary.*

REPORT OF HONOLULU CITY & COUNTY ASSOCIATION

The Nurses' Association, City and County of Honolulu, has had eleven meetings of the membership and twelve meetings of the Board of Directors since we last reported to you in May 1947. Attendance at the meetings has ranged from a low of 50 when we had the task of nominating 53 delegates and 53 alternates to the Territorial Nurses' Association Convention, to a high of 98 when Dr. Marcus Guensberg talked on "Psychosomatic Medicine, the Effect of Mind on Body."

Four of the programs were talks by physicians, although only 3 were medical, as Dr. Fronk gave a delightful presentation of big game hunting. Four programs were carried by C&C members with reports on national developments in nursing and on the practical nurse course and needs in the Territory; one meeting was devoted to the new nurse reserve corps and one was a purely social evening. The annual meeting took place in January.

The committees have been active. The By-Laws Committee recommended amendments to our By-Laws to bring them into accord with the Territorial Nurses' Association By-Laws and these were approved at the annual meeting. The Membership Committee has worked with TNA Membership Committee and C&C now has a roster of 561. County dues for members joining in the last quarter of 1947 were waived. A new section, the school nurses', has been formed.

The Program, Nominating and Finance Committees all have carried on their duties capably. The Chairman of the Blood Bank Committee wants you to know that blood from the nurses' reserve pool is available to any of the members of the Association. We find that 15 pints is a sufficient amount to keep our credit. We have no trouble maintaining this amount as nurses using the pool have had their friends replace the amount they used and more. As you know, use of the pool reduces the cost of a transfusion from $50.00 to $7.50.

A problem which has required a good deal of thought and more than a little worry is that of raising $1000.00 or more to finance our subscriptions to the *Inter-Island Nurses' Bulletin*. We cleared $628.00 by calendar sales, $267.00 by voluntary contributions of $1 per person and $250.00 from a bridge and white elephant sale. It was uphill work, the burden of which was carried by a fairly small group. Because this seems an unbusinesslike way of living from hand to mouth and because the *Bulletin* has had time to demonstrate its value, the Board of Directors of the C&C Association strongly recommends including the $2.00 per member subscription in the membership dues.

One of our hopes for the coming year is that we may succeed in interesting the four or five hundred members of C&C who at present take no active part in the organization. We are delighted with our increased membership: it is very gratifying to be able to say that we are rapidly on our way to 600 members. But, if all those 600 members were interested and participated, the Nurses' Association would be an organization of influence in the community and of greater usefulness to its members.

LAURA A. DRAPER, *President*

REPORT OF NURSES' ASSOCIATION, COUNTY OF HAWAII

Since the last annual meeting of the Nurses' Association, Territory of Hawaii, the program of the Hawaii Association has included the following subjects: collective bargaining for nurses; Hawaii Medical Service Association plan; Nurse Practice Act in Hawaii, licensing practical nurses; Rich Report on the structural study of the national nursing organizations; schools for practical.

nurses; the Hilo Blood Donors' Cooperative; the Rh factor; the causes of cough; the practical nurse in the Territory.

By an active campaign, membership has been increased from 45 in January 1947, to 85 at present. Minutes of the meetings have been sent to absent members.

In 1946, following the tidal wave, a memorial to Jane Service, who lost her life at that time, was inaugurated in the form of a library section that will be located in the new county library in Hilo to be completed this year. Individuals and organizations have contributed $286.55 in addition to many books and magazines.

Miss Josephine Hall, public health nurse in Kona district for many years, resigned her position because of ill health. She has been very active in the Association and is greatly missed by all of us.

JETTIE JACOBSON, *President*

MARGARET JONES MEMORIAL FUND

Chairman Margaret Makekau reported that $500 had been contributed toward the pledged $5,000 to the Medical Library and that $150.39 was contributed for the purchase of new books for the Nurses' Section of the Library. Demands on the fund this year have been for educational purposes only. The Committee is working on a procedure for collection of loans but has no recommendations to contribute at this time.

REPORT OF THE NURSING REPRESENTATIVES OF MABEL SMYTH BUILDING BOARD OF MANAGEMENT

The Mabel Smyth Building has continued to be used extensively as in the past. The auditorium has been in almost daily use, either by outside groups or enterprises, or by the member organizations of the building. Committee meetings have been largely those of member organizations. Since catering service is no longer available in the building there have been fewer teas and meals served. Nurses may still entertain in the building by making their own arrangements for refreshments and paying the service charge for the use of the kitchen facilities.

There has been an exchange of offices thereby giving the Territorial Nurses' Association and City and County of Honolulu Association larger quarters and putting the Manager's office in a more advantageous location for accommodating inquirers desiring information concerning the building. Redecoration of the building and furnishing is included in future plans but must be delayed until prices are within the limits of funds available for this project.

The following statistics summarize the building activities for the year July 1, 1947, to June 30, 1948.

	Number	*Present*
Committee meetings	148	1,742
Teas and refreshments	28	1,702
Luncheons and suppers	4	313
Times auditorium used	273	29,980*
Alice Yates Room (Without use of auditorium)	4	346

* Approximately.

HELEN GAGE
AGNES V. PETERSON
Board Members Representing Territorial Nurses' Association

COMMITTEE ON CONSTITUTIONS AND BY-LAWS

The Committee on Constitutions and By-Laws held four meetings during the past year. The Constitutions and By-Laws of the Nurses's Associations of the City and County of Honolulu and the County of Hawaii were reviewed. Proposed changes of the By-Laws are for the purpose of keeping them in harmony with those of the American Nurses' Association.

ELEANOR R. GRANUM, *Chairman*

CIVIL SERVICE CLASSIFICATION FOR NURSES IN TERRITORY

The presidents of the Nurses' Association, Territory of Hawaii, and Nurses' Association, City and County of Honolulu, met with the Civil Service Commission to request professional status for nurses employed by Civil Service. While the Commission was favorable to the change of status, the difficulties of reclassification make it unlikely to come about until a change in the entire classification system occurs.

NEWS NOTES FROM THE BIG ISLAND

MARY E. STANLEY, R.N.*

Miss Ruth Hopton of Pepeekeo Hospital was married to Dr. Joseph Malloy of Puumaile Hospital staff on June 9. They are at home to friends in their apartment in the Veterans Housing district.

Miss Helen Gorsuch, surgical nurse at Kona Hospital, returned on July 12 from a two months' vacation with her family at Vashon, Washington.

Miss Jean MacDonald, assistant supervisor of the Public Health Department, visited her family in Seattle, Washington, during the month of August.

Miss Margaret Chapman was married to Mr. Dotterman in August. He is musical supervisor for Hilo public schools.

Mrs. Katherine Burso of Puumaile Hospital staff is having a three months visit on the mainland beginning in August. She is thrilled over the prospect of a long visit with her sister in Kentucky whom she has not seen for twenty-seven years. Miss Ruby Peterson of California is relieving during Mrs. Burso's absence.

Miss Rosalind Hiapo, assistant surgical nurse of Hilo Memorial Hospital, will leave soon for a year's post-graduate course in surgery at Berkeley, California.

Miss Utako Uchimura has completed a post-graduate course at the Margaret Hague Maternity Center in New Jersey and returned to the Hilo Memorial Hospital in August.

Kona district has two new public health nurses. Miss Olga Larson from Farrington High School is relieving for the summer and Miss Pringle, a graduate public health nurse from the University of Hawaii.

MAUI NEWS

The Maui District Nurses' Association held the May meeting at the Pioneer Mill Restaurant at Lahaina. Following a delicious turkey dinner, Dr. William E. Toney spoke on the use of antihistaminic drugs in medicine today. The June meeting was held at Dr. K. Izumi's beach home at Kihei. Dr. C. L. Wilbar, Jr., President of the Territorial Board of Health, was guest speaker. He discussed trends in public health, especially with regard to Hawaii.

* Staff Nurse, Puumaile Hospital; reporter for Hawaii Nurses' Association.

Miss Marian Mesrol of Kula Sanatorium has recently returned from a two and a half months' vacation to the eastern coast of the mainland.

Marian Lawrence of Puunene Hospital visited relatives in Topeka, Kansas, and San Diego. Mary Estill of Puunene Hospital spent her vacation with her parents in Los Angeles.

Newcomers to Puunene Hospital are Marjorie Larson from Alaska and Mrs. Vera Coffman from Molokai. Mrs. Marguerite Soot of Seattle, Washington, is relieving for vacations at Puunene Hospital.

Mrs. M. C. Schmiding is in New York on a year's leave of absence beginning in August. She is a member of the Malulani Hospital staff. Ruth Ikeda of Malulani Hospital is on sick leave for a year. Cecelia Apo vacationed in Honolulu.

THE NURSING PROBLEM IN THE LAND OF THE MORNING CALM

MRS. ON SOON CHOI
AND
MRS. KUM CHUN WHANG*

IT IS A great privilege to be asked to write a short article about nursing in our country—Korea, the land of beautiful and rising sun and the home of the white-clothed people.

Until the last part of the nineteenth century no women of high class were supposed to go out in the street unless sitting in a covered sedan chair. Low class women wore green silk coats with red ribbons. They were covered from head to toe, exposing only eyes, nose and mouth.

After girls reached the age of ten they were required to stay in their homes to learn sewing and cooking. Cooking included learning how to make all kinds of dishes for great occasions such as sixtieth birthdays, wedding parties, ancestor worship days and national holidays. Girls had to learn to wash white clothes with unusual care and to iron linen and silk by pounding them with sticks on a polished stone to make the material as smooth and nice as when it was newly woven. They learned to take care of babies and wipe the floors, which had to be smooth and clean because it was customary to wear no shoes in the bedrooms. They also learned how to behave before parents, grandparents and other elderly people. They were taught to read and write, at least enough to send letters home after marriage, for they were not supposed to come home very often. They had to learn the care of the sick in the home and the care after death.

To explain something about home nursing in the past, before Western medicine was introduced to Korea, the principles of nursing were similar to modern ones. For instance, feeding liquid diet to the patient when he has fever, using a chamber pot in bed, trying to make the room clean and quiet, turning the chronically ill patient from side to side, good rubbing of arms and legs, and elevating the back by supporting pads, against the wall or by leaning against someone to make such a position as that known as semi-Fowler's at the present time. Oral reports of all symptoms were necessary to help the doctor treat the patient, but the pulse was never taken by the caretaker because it was considered too important to entrust to a lay person. But she had to prepare medications from the herbs weighed by the doctor according to symptoms and age of the patient, and it was necessary to make the amount and temperature just right so that the patient could drink it all easily. Bedbaths were not given because it was felt they might make the symptoms worse. The home nurse had no scientific measurement of any kind but it was very important to have in mind the comfort and happiness of the patient and everything was done carefully and sincerely.

Girls were taught to be homemakers, and education outside of the home was not permitted. Housekeeping was considered women's God-given job and service to anyone outside of the family was looked down upon, as only low-class women did things for others in order to earn a living. Along with Western medicine introduced by the missionaries, the new way of hospital nursing care was brought to this untouched land, and it was really a shock to the people. At the same time the door for women's public education was opened, but there was no response until the royal family became interested in Western education and medicine. The people were gradually convinced in those new aspects by the whole-hearted service of the self-sacrificing missionaries whom God sent to the land to release them from the boundaries of their own conservative culture.

Different denominations of Christianity had built hospitals and established schools for nurses in different parts of Korea. In 1923 the nurses organized an association called "Chosen Kanhobu Hoy." They worked hard to raise the standard of admission to schools of nursing to the level of high school graduation for the three year nursing course. Nursing texts and reference books were prepared and the *Bulletin of K.N.A.* was issued quarterly. The association became an associate member of the International Convention of Nurses. Many high school graduates applied for nurses' training and in 1926 a college graduate

* Mrs. On Soon Choi and Mrs. Kum Chun Whang are studying modern nursing methods at The Queen's Hospital where they will remain for several months before returning to Korea to assist in establishing an educational training program for student nurses.

applied for the first time. Since then a number of college graduates have become student nurses.

At about the time the mission hospitals were established, the government built one general hospital in each of thirteen provinces. They added a few more to some of the provinces later. Most of these hospitals had schools for nurses but they accepted six-year primary school graduates and the course was one or two years, so that nurses were not well trained. The trend of nursing instruction was more on the theory of diseases than good clinical nursing care and hospital nursing administration. Nursing arts, ethics, history and clinical instruction were omitted from the school program and in some respects nurses were more like handmaids for the doctors rather than the liaison between patients and doctors. The shortcomings of the profession were recognized by the public and girls were not encouraged to become nurses. No nurse of the government hospitals ever was proud of her calling and yet there was no movement for improvement. Also, these girls could not join "Chosen Kanhobu Hoy" or become associate members of I.C.N.

In 1929 three representatives of KNA went to Montreal for the I.C.N. conference, hoping to establish active membership. Unfortunately, since Korea was not an independent country and KNA did not have membership of all nurses, this was not possible and was a great disappointment to KNA as there seemed to be no hope of ever attaining full membership of I.C.N.

The discouragements of the war years greatly influenced the mental and physical health of our people. For the war, they had to give up everything to help win. At the last when the call came for young boys and girls to go to the war fields, there was much bewilderment and many people resumed old superstitious practices to save their children from suffering and death. During this period, there was little progress in the nursing profession.

Then suddenly, after the end of the war in August 1945, Korea was occupied by U. S. A. forces in the south and Russian Soviet in the north, with the promise of independence to the nation as soon as possible. This really tied up the blood vessel of the nation and there has been no official transportation or communication between the north and the south. Many people lost their property by escaping from the north to the south in their search for freedom and peace. Thousands have been coming for the past two years.

In the south the United States Military Government set up a Bureau of Nursing Affairs in the Public Health and Welfare Department in October 1945. This was like a strong stimulant to the nursing profession, which had been nearly forgotten during the war years because of lack of personnel and materials. Several army nurses came to Korea but the first one, Captain M. V. Lucka, came all by herself and was truly a brave young pioneer. Korean nurses, scattered throughout the country during the war, gathered together again. With the help of the army nurses, refresher courses were instituted for institutional nurses, hospital nursing administrators, public health nurses, leadership for nurses and midwifery. A Nursing Board of five nurses and four doctors was organized which conducted surveys of hospitals and schools. Curricula were revised, and rules and regulations for accrediting schools of nursing established on a national basis. Registered and licensed nurses have organized the Korean National Nurses Association which is better than that established in 1923 for it is a combination of all private and public hospital nurses. The second annual meeting was held in May 1948 in Seoul.

Korea is developing her own political organization and now the time has come to promote the nursing profession along with that of the national background. To help develop good nursing care, some of the retired nurses have had to return to work and it has been their desire to observe, in modern hospitals in western countries, the up-to-date methods in hospital nursing, administration and nursing education. Some Korean nurses have been given mainland scholarships. We have been favored by The Queen's Hospital and it is a great privilege and pleasure to visit Honolulu and study in this hospital. We are very grateful to The Queen's Hospital and the Korean friends in Hawaii who made it possible for us to come here, especially the Korean nurses in Honolulu who are interested in the progress of the nursing profession in their mother-land. We sincerely wish that the heart of living sacrifice will be burning forever for the better health of their own people and for all human love.

ALOHA, CHARLOTTE KERR

On July 31, Miss Charlotte Kerr, R.N., M.S., (Oberlin College, Presbyterian School of Nursing, New York), left Honolulu to begin a new life and take up new work in Thetford, Vermont. Such a beautiful state is a fitting substitute for the fair isles; and becoming an innkeeper is a worthy substitute for nursing. At least, so it appears to a few of us who are left to struggle with the trials and tribulations of the profession in its present day changing.

Nursing circles in Hawaii have suffered a great loss through Miss Kerr's decision to turn to other endeavors. She has been an untiring and sincere laborer in the cause of nursing service and nursing education in the

Territory. During her first residence here, she was director of nursing education at The Queen's Hospital. She returned to the mainland for two years and was director of nurses at Touro Infirmary, New Orleans. Upon her return to Hawaii in May 1946, she accepted the position of director of nursing education at Leahi Hospital. The excellent progress and results of the program in tuberculosis nursing for student and post-graduate nurses will stand as a tribute to her capable leadership. She contributed unselfishly to the nursing profession as a whole through acceptance of committee membership and in advisory capacities and did not shirk the added responsibilities these appointments demanded. Up to the time of her departure, Miss Kerr was director of nursing education at Leahi Hospital, a member of the Board of Licensing of Nurses, a member of the Advisory Board of the Practical Nurse School, Vice-President of the Hawaii League of Nursing Education and Advisor of the Queen's Hospital Alumnae Association.

The affection and admiration of her many friends and co-workers in the city were evidenced by the large number of parties given in her honor after the announcement of her resignation in June. It is with sincere regret that we bid Miss Kerr aloha, but the best wishes of many accompany her in her new ventures. Her influence in nursing here will remain for a long time to come.

PRACTICAL NURSE STUDENTS GIVE COMMUNITY SERVICE

MRS. MARJORIE ELLIOT, R.N.*

TING—A—LING—A—LING!

"906215, Practical Nurse Training. . . .

"Yes, our students go into homes to give nursing care. . . .

"Your wife is just home from the hospital with a new baby and needs help? . . .

"Certainly, our home nursing supervisor will bring a student out to your home tomorrow morning at 8 to stay until 11:30. . . .

"Oh yes, she will bathe and feed the baby, sterilize bottles, prepare formula and do the baby's laundry. If she has time she will also be glad to help with the other children, the cooking or the housekeeping. . . .

"No, she is not to be paid for her services. The experience is a valuable part of her training as a practical nurse. . . .

"Yes, indeed, you may pay her car fare if you wish. I am sure she will appreciate that. . . .

"Until tomorrow then, goodbye."

This type of telephone conversation occurs frequently in the office of the Practical Nurse Training Course which was established by the Department of Public Instruction and is located in the Washington Intermediate School Building.

Students in groups of six receive, in the latter part of their training, three weeks' experience in home nursing. During the first two weeks they spend approximately three and one-half hours each morning in the home assigned and the remainder of the day at the school as a part of a home management group. In this class the students work as members of a family under the supervision of Miss Mary Murai, the Home Economics instructor, to carry out the various phases of home management such as meal planning and preparation, serving, eating, budgeting and housekeeping in the practice apartment of the school.

The third week is devoted entirely to home nursing enabling the students to spend seven hours in the home or to work in two separate situations, depending upon the need in each case.

Since the beginning of the home nursing experience on May 10 of this year the practical nursing students have assisted 25 mothers in the care of new babies, doing the type of work suggested in the telephone conversation above. They have also been giving nursing care in the home to four chronic invalids.

One of these is an elderly woman who speaks practically no English, has one leg amputated and is partially incontinent. The student caring for this patient prepares and serves her breakfast, gives her complete morning care including her bath and the dressing of ulcers on the remaining leg, cleans her room and does her laundry.

A patient in the last stages of cancer was given nursing care which enabled the student nurse to have experience in the care of a colostomy and to demonstrate her ability to be patient, tactful and understanding with a very weak and emaciated patient.

Another woman, in very poor circumstances, who is bedfast with hemiplegia, not only enjoys the pleasant company of a cheerful nurse who gives her a bath each morning, but finds life much more comfortable and her sleep uninterrupted by bites since the student waged war on the offending inhabitants of her bed and the bed of her husband which is in the same room.

Although some of the cases carried by the practical nursing students are in the lower income group, many are people in comfortable circumstances who are unable to find temporary help to tide them over emergencies when assistance is needed or who are unable to pay for nursing care over an extended period as in chronic or convalescent cases.

A professional nurse requiring bed care at home for several weeks following an operation is enjoying her morning bath as given by a student prac-

* Instructor in Charge, Practical Nurse Training.

tical nurse who also prepares and serves her breakfast and lunch, cleans her room and does her personal laundry.

The work of these students is always supervised by a professional nurse, either Mrs. Schattenburg, the co-ordinating instructor of the school, or Mrs. Ishikawa, who is the part-time supervisor of home nursing. Chronic cases are carried indefinitely as the need for nursing care continues, but with a different student on duty each week. Mother and baby cases are usually carried only one week but in situations where additional help is necessary for the welfare of either, the time is extended.

Thus far cases have been referred by hospitals, public health nurses, doctors and friends or neighbors who have received or know of the services offered by the practical nursing students.

With only six student nurses available at any one time to give nursing care in the home, the number of patients who can be cared for is limited but the program does afford the student a valuable and unforgettable experience.

By making this service available it is hoped that the school may be able to return to the community a small reflection of the helpful cooperation given by the many interested, community-minded people who made it possible for the Practical Nurse Training Course to be born.

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THE HAWAII MEDICAL JOURNAL

P. S.: PAGE 74 LISTS THIS MONTH'S ADVERTISERS.

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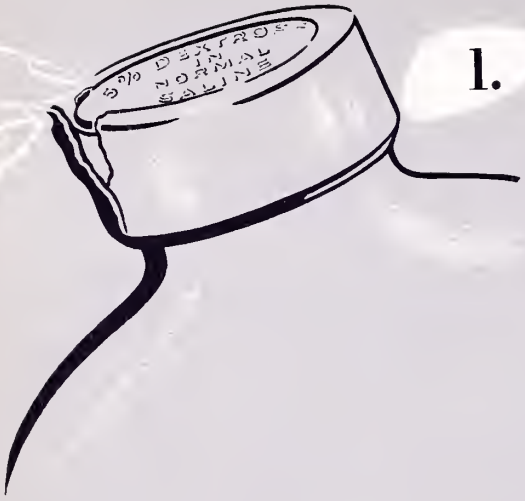


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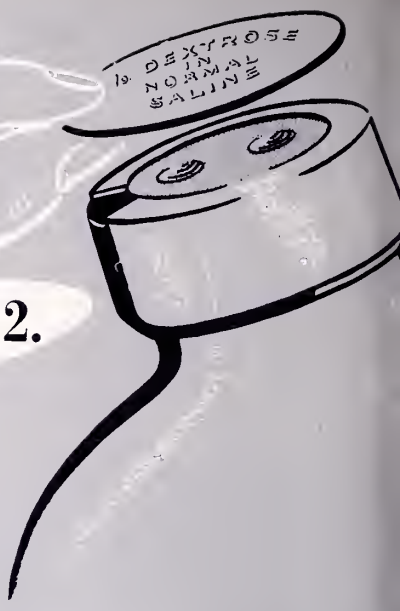
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*Snyder, M. L., Kiehn, C. L. and Christopherson, J. W.: Mil. Surgeon, *97*: 380, 1945. • Shipley, E. R. and Dodd, M. C.: Surg., Gynec. & Obst., *84*: 366, 1947 • Mays, J. L.: J. Med. Assoc. Georgia, *36*: 263, 1947. • Curtis, L.: Surg. Clin. N. America, 1466 (Dec.) 1947.



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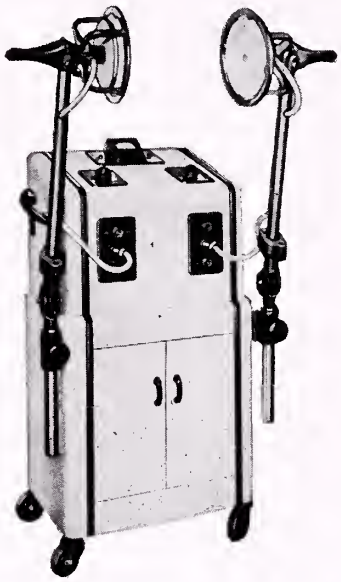
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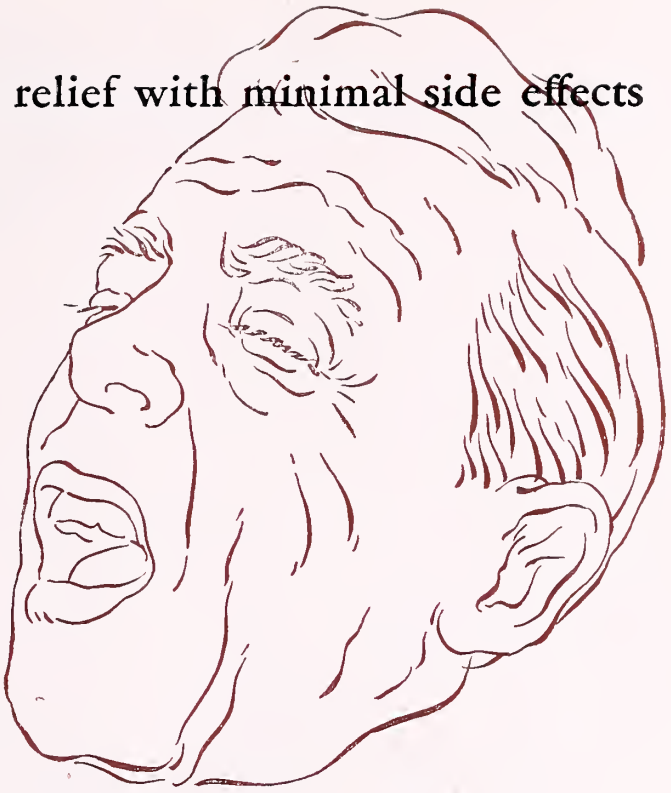
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1. Arbesman, C. E.: *N. Y. State Jl. of Med.*, 47: 1775, 1947.
2. Loveless, M. H.: *Am. Jl. of Med.*, 3: 296, 1947.
3. Bernstein, Rose and Feinberg: *Ill. Med. Jl.*, 92: 2, 1947.
4. Osborne, Jordon and Rausch: *Arch. of Derm. & Syph.*, 55: 318, 1947.

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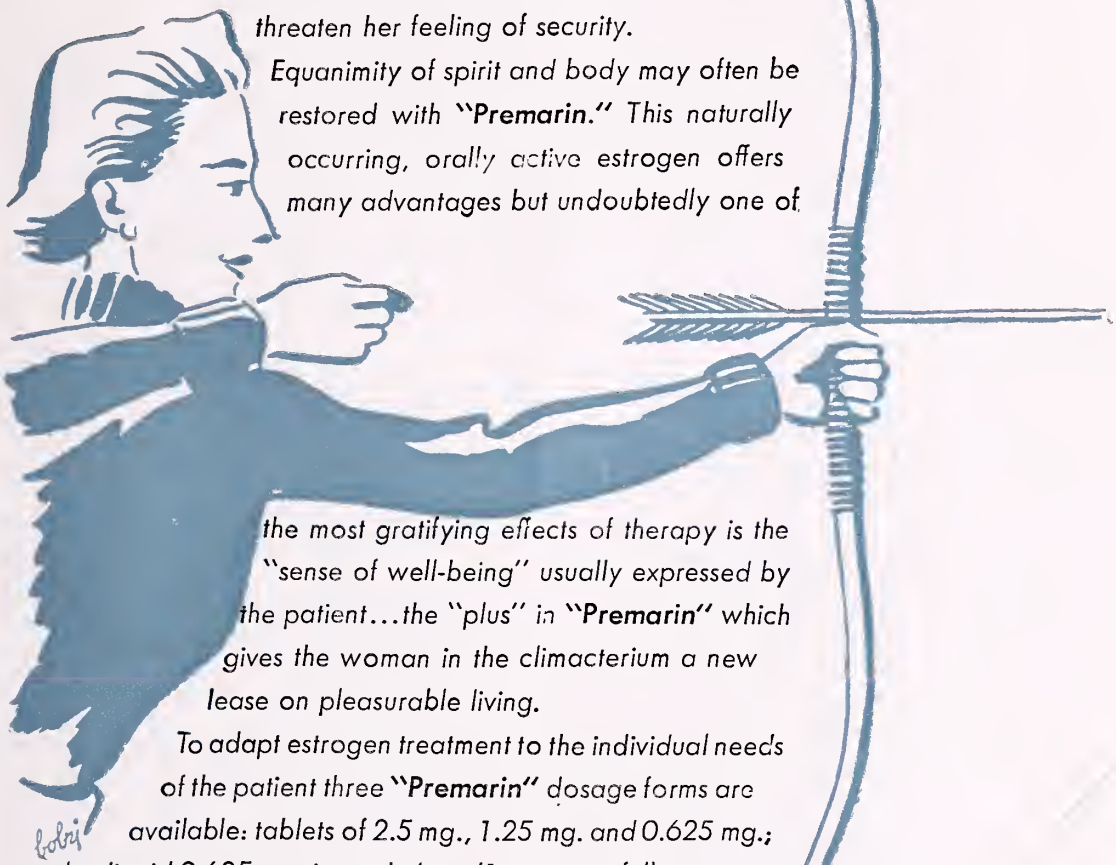
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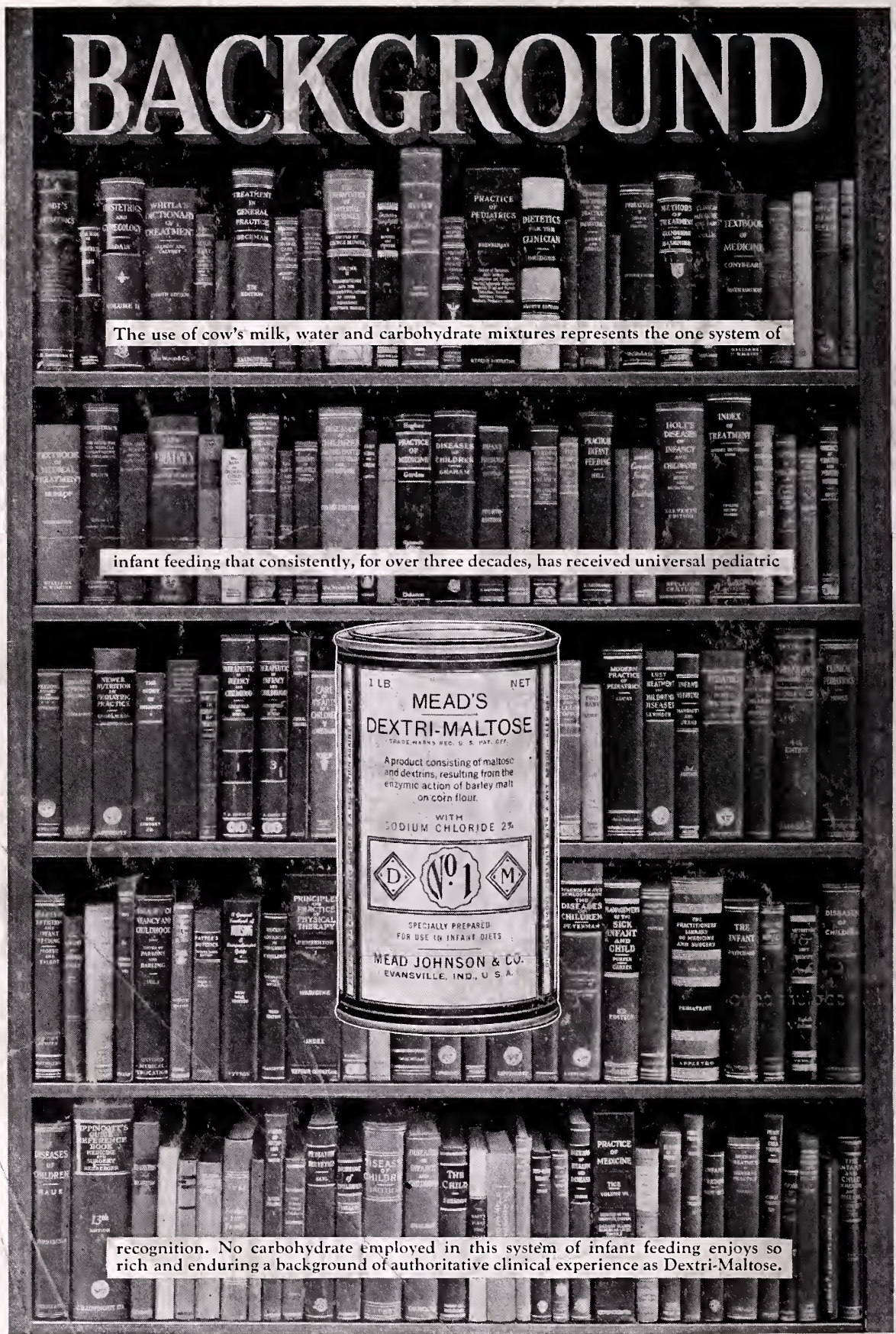
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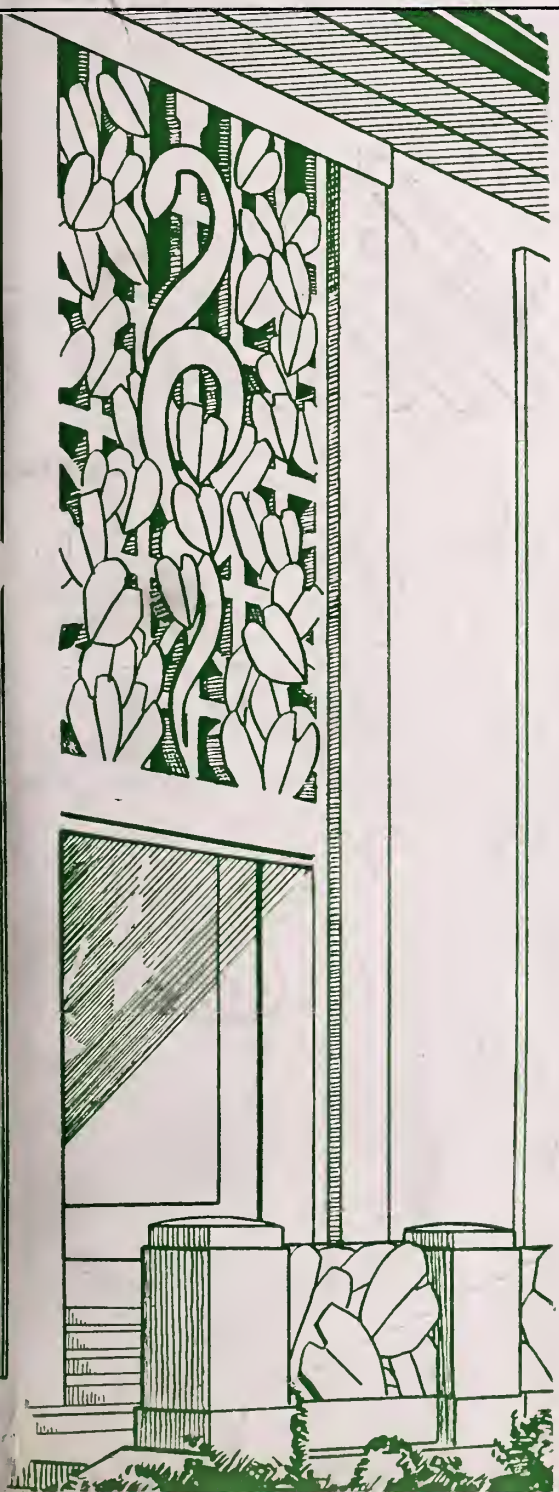
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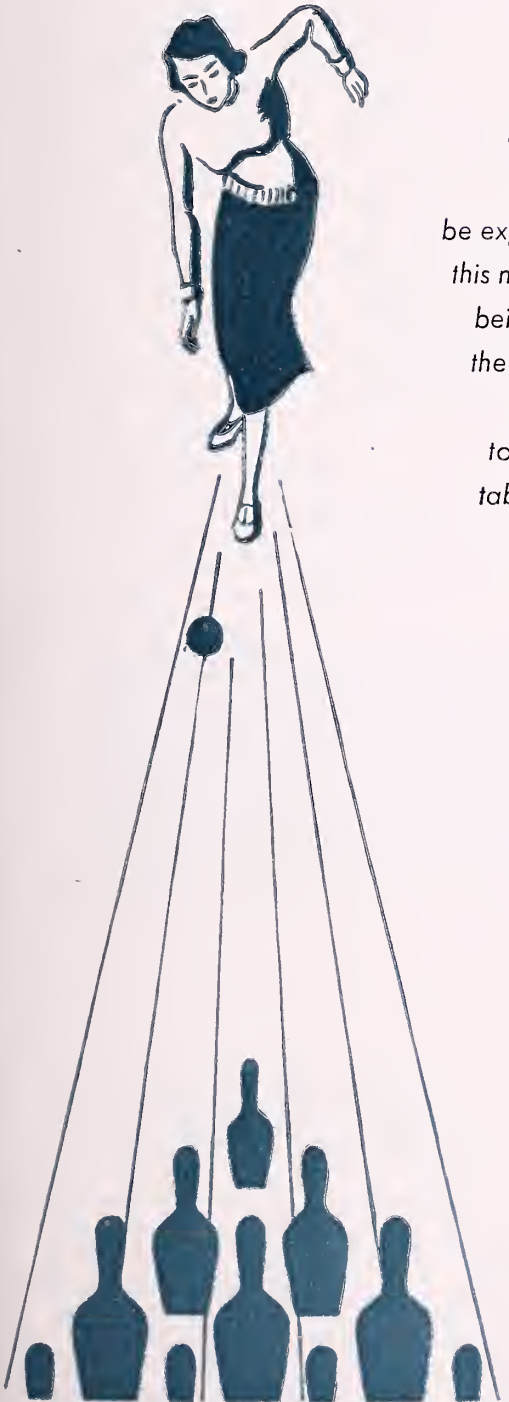
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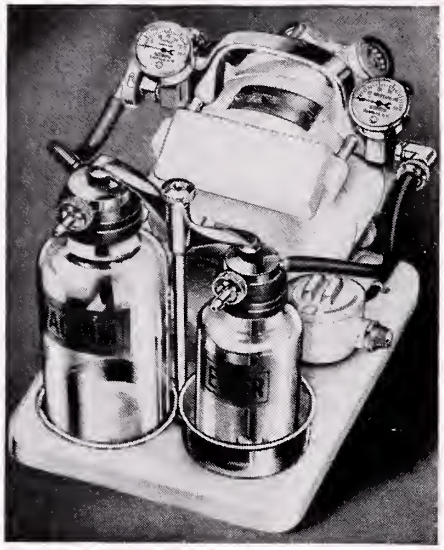
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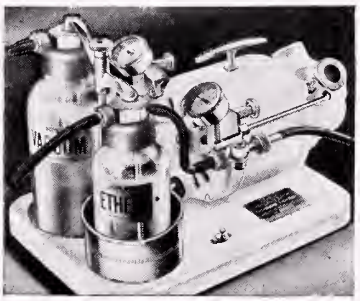
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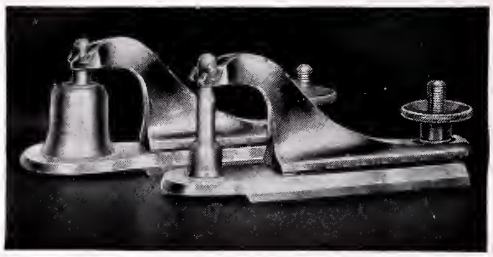
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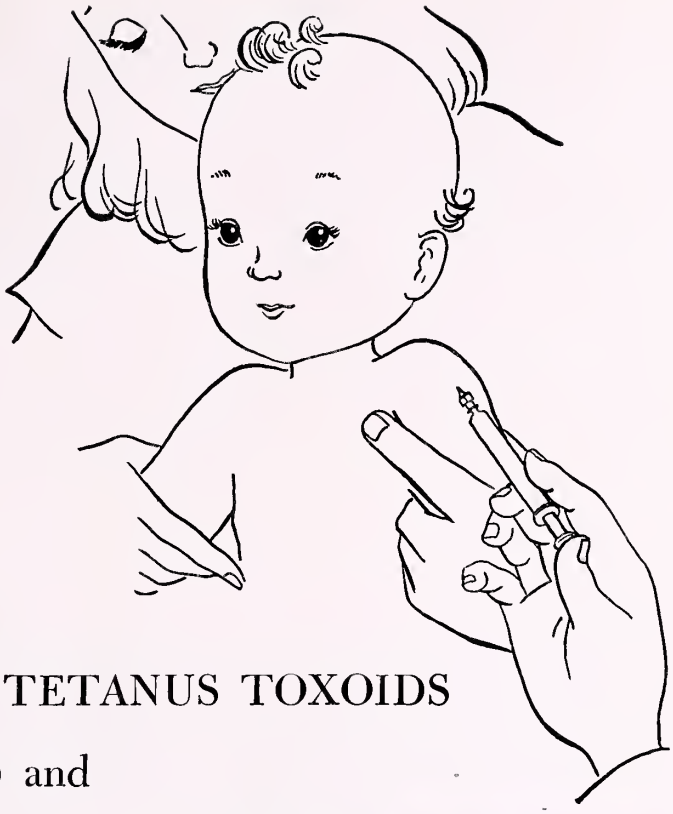
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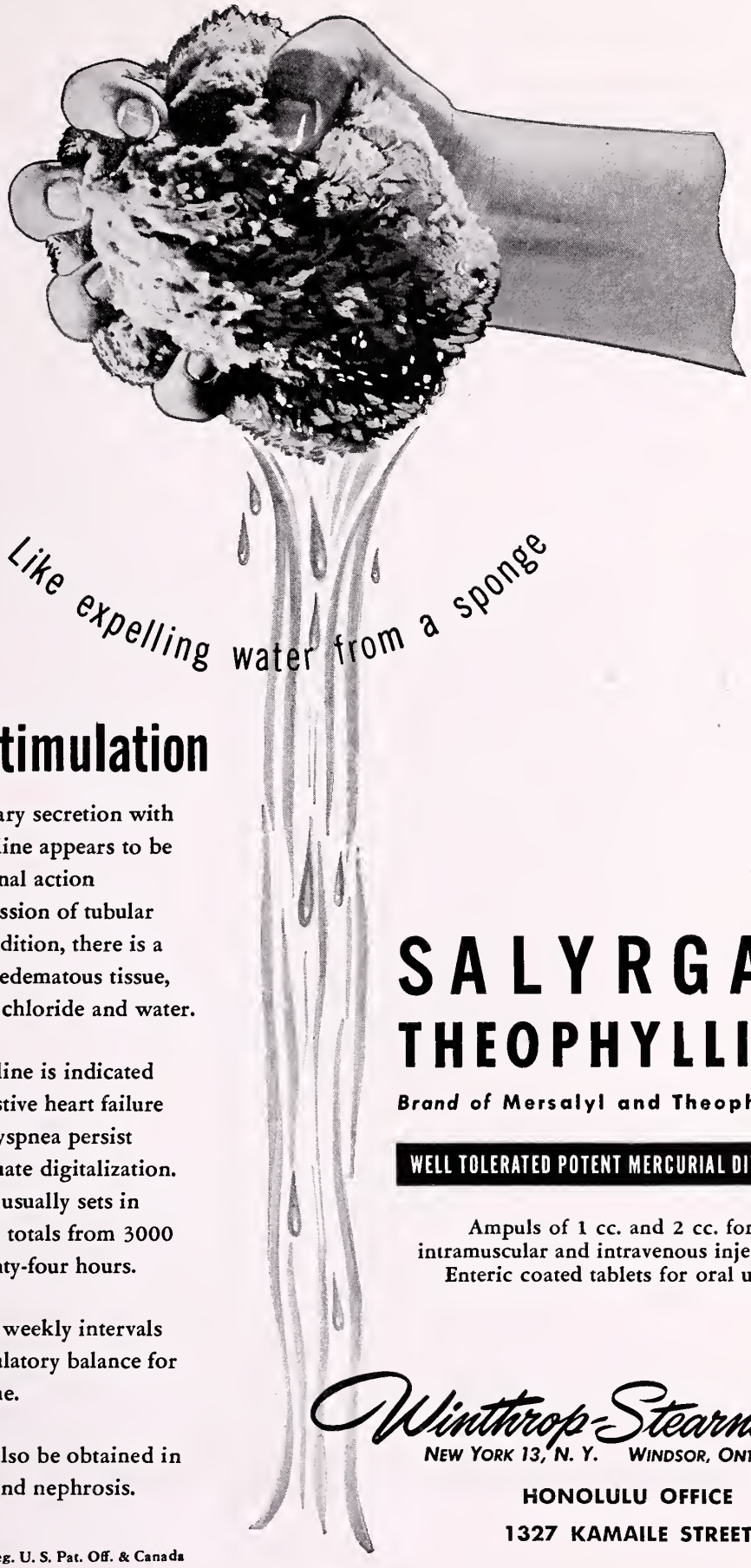
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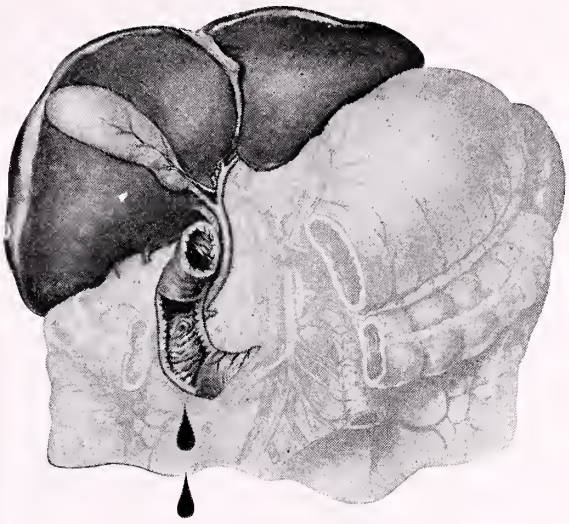
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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jon. 1937, Vol. XLVII, No. 1, 58-60; Proc. Soc. Exp. Biol. and Med., 1934, 32,241; N. Y. State Journ. Med., Vol. 35, 6-1-25, No. 11, 590-592.

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*Beams, A. J., and Endicott, E. T., Histologic changes in the livers of patients with cirrhosis treated with methionine, Gastroenterology 9:718-735 (Dec.) 1947.

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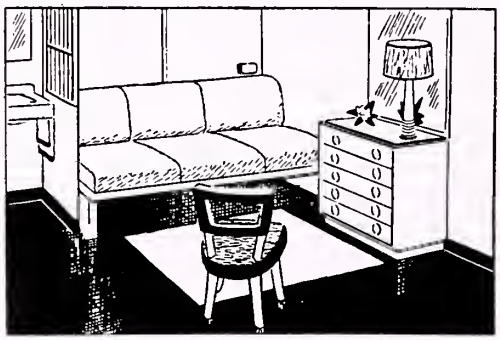
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Streptomycin in the Medical and Surgical Treatment of Tuberculosis

R. N. PERLSTEIN, M.D.[1] AND P. W. GEBAUER, M.D.[2]
HONOLULU

THE FINAL test of a new therapeutic agent is its effectiveness in the hands of the clinician. The powerful antibiotic substance streptomycin is now in this stage of testing after having undergone four years of concentrated study by some of the finest research groups in the country. No physician living in our time can be unaware of the enthusiasm which attended the announcement of the isolation of this substance, nor can he withhold his admiration of the skill and address that went into its preliminary testing. The authors of this paper regret that time does not permit acknowledgment in detail of their debt to the many fine minds whose work laid the foundation for all we know about streptomycin.

We propose to give the results of a clinical therapeutic trial of the drug on selected medical and surgical cases of tuberculosis in a large local sanatorium. Dr. Paul Gebauer began using the substance in December 1946 at Leahi Hospital The patient was an ex-policeman who had just had a right pneumonectomy for tuberculosis. The removed lung showed extensive caseation throughout with giant cavitation at both apex and base, and a bronchopleural fistula with empyema was present on the operated side, along with a tuberculous spread on the opposite side. This looked like a pretty desperate state of affairs and appeared to justify the use of a substance then costing $8.00 a gram. This man has recently been discharged from the hospital in good condition and sputum negative. Table 1, which follows, presents the results of streptomycin therapy in excisional surgery for tuberculosis.

TABLE 1.—*Resection for Tuberculosis With and Without Streptomycin.*

	NO. PTS.	NO. OF P.O. TB SEQUEL	% TB P.O. SEQUEL	% SPTM NEG	DEATHS
Leahi—No Strepto.	8	4	50	100	0
Leahi—Strepto. used	19	2	10.5	84.2	0
[3]4th Strepto. Conf.—No Strepto.	20	8	40	?	?
[3]4th Strepto. Conf.—Strepto. used	66	7	10.6	?	2
Total—No Strepto.	28	12	43		
Total—Strepto. used	85	9	10.6		

[1] Associate Medical Director, Leahi Hospital, Honolulu.
[2] Resident Thoracic Surgeon, Leahi Hospital, Honolulu.
Read at the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 8, 1948.
[3] See explanation of Streptomycin Conference, below.

The important complications of resection are first, spread of the disease to uninvolved lung; second, infection of the pleural space; and third, broncho-pleural fistula, which is usually dependent on infection. The table shows a gratifying decrease in the incidence of these complications with the use of streptomycin, but does not tell the whole story. For the use of streptomycin is also highly effective in the treatment of these complications when they do occur. Thus, 4 out of 8 patients had complications following resection without the use of streptomycin. These complications were less serious in nature, and all responded well to treatment, with streptomycin, so that now all of the patients are negative and three of the four have been discharged.

There is the possibility that too much reliance will be placed on the power of streptomycin and a more hurried and less meticulous surgical procedure might result. This would be a tragedy, for despite the use of streptomycin, the best prophylactic for spread is the absolute avoidance of spill of secretions to good lung during operation. The best safeguard against infection is still a thoroughly clean, meticulous operation, and the avoidance of spill and contamination.

So long as it is necessary to divide and suture the bronchus, any resection procedure is never absolutely aseptic, and some contamination occurs. In our experience the local use of streptomycin on the operating table and its instillation in the pleura in the early post-operative period will frequently forestall the development of infection from this degree of soiling. In this series, three patients had positive cultures of the early post-operative pleural fluid and subsequent cultures were negative. We attribute this to the local use of streptomycin in addition to its parenteral administration.

In August 1947 the trustees of Leahi Hospital set up a fund for the therapeutic trial of streptomycin on all patients thought suitable by the medical staff. The criteria selected closely paralleled those in use by the Streptomycin Conference, composed of the Veterans Administration, U. S. Public Health Service, American Trudeau Society, National Research Council, U. S. Army and U. S. Navy. Up to November 1947 the dosage schedule

for these carefully selected cases was 1 to 3 grams daily given in four divided doses six hours apart. Treatment was given for 120 days. The largest dose was used for the severest forms of the disease. In November most new cases received 1 gram daily in two divided doses 12 hours apart. Treatment was shortened to 42 to 90 days. Frequent symptomatic reviews were made and careful laboratory and x-ray control was practiced.

A total of 102 patients have received streptomycin therapy at Leahi, of which 22 are still being treated. This report is based on 80 patients who have completed therapy. Of these 62, or 77.5 per cent, are regarded as having shown good results of therapy; 8, or 10 per cent, are improved; 6, or 7.5 per cent, are unimproved; and there have been 4 deaths (5 per cent).

The tables which follow show results in more detail for various medical categories together with comparable analyses from the recent literature (Tables 2 to 5).

Sputum conversion from previous positive to negative occurred in 56 per cent of the medical cases and in 93 per cent of those treated surgically. Toxicity in the form of vertigo and the other manifestations of 8th nerve damage occurred in 23 of the 80 patients (29 per cent). In most of these the symptoms were of slight to moderate intensity. Eosinophilia of 5 per cent or more occurred in 43 or 54 per cent. No other important signs of toxicity were noted. In most cases the drug was well tolerated and such symptoms of discomfort as did appear were viewed by patients as a small price to pay for their striking amelioration of symptoms. This usually included rapid decline of fever, diminished sputum and cough, cessation of sweating, resumption of appetite and weight gain, and in general, a remarkable increased feeling of well being.

TABLE 2.—*Miliary and Meningitis Cases Treated with Streptomycin.*

	NO. PTS.	ALIVE. NO SEQUELAE	ALIVE. NEUR. SEQUELAE	DEAD
Leahi	7	3	1	3
Lincoln *et al.*	199	26	59	114
Total	206	29	60	117
Percent	100%	14%	29%	57%

Miliary and meningitis cases are grouped together in this table because experience has shown that they are very closely associated in both children and adults, occurring very frequently together in the same patient or in sequence. While we were unable to do concentration tests on our patients, some facts about the absorption, excretion and concentration of streptomycin may be introduced here.

Streptomycin is ineffective when given orally, nearly all of it being excreted in the feces. When given parenterally, about 50 to 75 per cent of the daily dose is excreted. Two-thirds of this excretion is by the kidneys. The bacteriostatic concentration is less than 2 micrograms per cc. of tissue fluid in the living body while 0.4 of a microgram per cc. inhibits growth *in vitro*. The drug is insoluble in lipids and acts poorly or not at all in an acid medium. Consequently it shows no concentration in brain tissue and its effect in empyema, where an acid reaction exists, is slight. With intramuscular streptomycin the concentration in spinal fluid is only about one-fifth that in blood serum. When streptomycin is given intrathecally, concentrations as high as 1500-2500 micrograms per cc. of spinal fluid may be obtained. No streptomycin at all is found in the brain, even with intramuscular doses as high as 10 grams per day.

TABLE 3.—*Larynx, Trachea and Bronchi: Results with Streptomycin.*

	NO. PTS.	GOOD	IMPRVD.	UNCHGD.	WORSE
Leahi	16	12	3	1	0
4th Strep. Conf.	51	28	19	4	0
Bogen *et al.*	78	43	23	12	0
Total	145	83	45	17	0
Percent	100%	57%	31%	12%	0

This table summarizes the results obtained in tuberculous disease of the upper respiratory structures. It must be noted that these patients all had pulmonary tuberculosis as well, usually of advanced and progressive type. A good result here means healing of the ulcerative lesion observed by laryngoscopic or bronchoscopic direct observation, accompanied by clearing of the lung lesion and in the majority of cases by conversion of sputum from positive to negative. After a daily dose of 1.8 to 2.0 grams, streptomycin concentrations are reported to be 11 to 13 micrograms in the blood, 12.1 micrograms in the tracheobronchial tree, 8.8 micrograms in the pleural space and 7.7 micrograms per cc. in cavities.

TABLE 4.—*Sinuses: Effect of Streptomycin.*

REPORTED BY:	NO. PTS.	NUMBER OF SIN.	HEALED	IMPROVED	UNCHGD.
Leahi	8	14	11	3	
B. I. Brock	12	60	59	1	
4th Strep. Conf.	186	195	118	51	26
Total	206	269	188	55	26
Percent		100%	69%	21%	10%

The effect of streptomycin on long existing draining sinuses is remarkable and striking. Use of the drug is recommended in all such cases where surgical drainage is contemplated or has already been resorted to. Without adequate surgical help, the use of streptomycin may not be

effective, and we have attempted to assure adequate drainage in all cases where use of the antibiotic was planned.

TABLE 5.—*Streptomycin in Other Tuberculosis: Leahi Patients Only.*

	NO. PTS.	GOOD RES.	IMPRVD.	UNCHGD.	DEAD
Caseous Pneumonia	7	4	0	3	0
Reactivation	6	5	0	0	1
Peritonitis	5	5	0	0	0
Other TB Cond.	3	3	0	0	0
Total	21	17	0	3	1
Percent	100%	81%		14%	5%

Caseous pneumonia responds rather poorly to streptomycin because caseous material is usually acid in reaction. Since it is a condition of grave prognostic import to the patient, it is still an imperative indication for therapy. In recent exudative reactivations, results are usually good, especially if therapy is started early. The one death in this category occurred in a patient whose reactivated disease was treated four months after readmission, when extensive cavitation was already present.

The excellent results obtained in tuberculous peritonitis deserve special mention and are in part due to the fact that streptomycin concentrations are approximately as high in peritoneal fluid as in blood serum. Of these 5 patients, 4 were desperately ill, emaciated persons for whom all hope of recovery had been abandoned.

In the final group are included one case of tuberculosis of the wrist and ankle, one pleural effusion and one patient with persistent positive sputum and no demonstrable lung or tracheobronchial lesion. All showed resolution or healing.

Although our follow-up period has been too short to take account of reactivations after streptomycin therapy, reliable figures from other sources indicate that about one-sixth of treated cases may be expected to relapse at some later period. Both these and a good many of the streptomycin failures are due to the development of resistant tubercle bacilli, which may show up as early as the thirtieth day of therapy. *In vitro* experiments show that 80 per cent of virulent strains of human tubercle bacilli become resistant to streptomycin after 120 days of contact with the drug. These resistant strains then maintain both their resistance and their virulence indefinitely thereafter. This peculiarity of the tubercle bacillus has been the greatest handicap to successful treatment with streptomycin. It has led to a reluctance, on the part of most men, to resort to use of the drug in early tuberculosis and in all forms of the disease for which collapse therapy is suitable. This attitude can best be summarized in the words of one group of authors who have contributed a very valuable and painstaking study of a clinical trial of streptomycin on patients with pulmonary tuberculosis:

"At the present time it would seem proper to administer streptomycin to cases of progressing moderately advanced or far advanced pulmonary tuberculosis [which are] of recent origin and in which the disease is of predominantly exudative character. In chronic cases in which extensive fibrotic changes have already occurred streptomycin should not be used until the timing of its administration has been carefully considered in relation to possible surgical therapy."

The Reticulo-Endothelial System

PAUL KLEMPERER, M.D.[1]
NEW YORK

THE reticulo-endothelial system, as originally conceived by Aschoff, unites a multitude of heterogeneous mesenchymal cells, widely dispersed throughout the animal body, according to one single functional similarity: the ability to store colloidal dyes in granular form. This is, of course, a definition based mainly on experimental work. If you take a drop of a colloidal dye and examine it under the microscope you do not see particles; they are too small. When you inject this material into the vein of a rabbit, however, you recognize that there are granules of that dye accumulated within certain cells; and these, since Aschoff, are recognized as belonging to a large system, which we call the reticulo-endothelial system. The individual members of the system, such as the reticular and endothelial cells of lymph nodes, spleen and bone marrow, and particularly the stellate cells of Kupffer of the sinusoids of the liver, and the mononuclear ameboid wandering cells of the loose connective tissue, had been identified by histologists many years ago; but their biological interrelationship had not been realized on purely morphological grounds. The structure of the nuclei and the total appearance of the cells were evidently not similar enough to permit the static morphologist to recognize that these cells belong together. Some evidence of their functional abilities, such as phagocytosis of foreign material, the faculty of fiber formation, had been fully recognized, and their potentialities of progressive differentiation had been conjectured at by investigations of histologists, embryologists and also pathologists. It was well known, before the turn of the century, that in the embryo there are certain cells which develop into blood cells, but they had not been identified as being dispersed throughout the body.

While in Aschoff's original conception the storing ability of the reticulo-endothelial system was singled out, subsequent investigations disclosed additional functional aspects. The fundamental feature of the system is its reactivity to a variety of stimuli which provoke on one hand cell proliferation and on the other hand differentiation, in contrast to the behavior of other cells of mesenchymal origin which represent final developmental stages. The cells of the reticulo-endothelial system of the adult organism can be conceived as having retained part of their embryonal potencies, and these embryonal potencies can be reawakened by adequate stimulation. This concept has been mainly developed by Maximow, who spoke of this system, which Aschoff called the reticulo-endothelial system, as the embryonal germ layer of the adult organism.

Now, the main lines of differentiation of these cells are the histiocytic-macrophagic, hematic, endothelial and fibroblastic. These lines of differentiation coincide fully with those which the embryonal cells have. And you can see under pathological circumstances that the cells undergo such differentiation. This expanded conception of the reticulo-endothelial system has been evolved mainly through the critical interpretation of morbid conditions observed by pathologists and is supported by investigations of experimental pathologists and by the results of tissue culture.

Excessive proliferation of cells of reticulo-endothelial origin dominates the morbid picture of a great variety of human diseases. One might therefore collectively designate such morbid processes as reticulo-endothelioses. But this would not be satisfactory because it is the object of pathology to classify disease not only according to seat, but also according to cause. The theory that the reticulo-endothelial system is capable of distinctive proliferation caused by distinctive stimulation has been the cornerstone of differential diagnosis as well as of rational inquiry into the pathogenesis of these complex morbid processes. What we are trying to determine is not only that there is a proliferation, but the why and finally the mechanism. The morphologic classification, however, of diseases characterized by proliferation of the reticulo-endothelial system, may well be based upon the recognized developmental potencies of the reticulo-endothelial system. Since, however, the ultimate aim of our investigation must be the recognition of the factors which determine the distinctive proliferation, it must be admitted that at present, information on this aspect is still most inadequate.

The reaction of the living organism to the invasion of microorganisms is a complex process which is designated as inflammation. Proliferation of histiocytic elements of the reticulo-endo-

[1] Pathologist to Mount Sinai Hospital and Professor of Pathology, Columbia University, New York City.

Read before the Honolulu County Medical Society, May 10, 1948, in a series of postgraduate lectures.

thelial system in addition to emigration of blood cells is one of the fundamental features of inflammation. A predominant histiocytic macrophagic reaction is characteristic of many bacterial and protozoal infections, and I should like to illustrate this statement with the demonstration of typhoid fever, in which for many years it has been recognized that histiocytes are very prominent. Before, however, I just want to demonstrate three slides taken from the textbook of Maximow. Here are these cells which Maximow considered as the embryonal syncytial cells and these cells resemble the adjacent large lymphoblasts. The nucleus is very similar so that we can see in this picture the differentiation of the embryonal cells, the cells of the reticulo-endothelial system into hematic cells. The next picture shows you the effect of injection of intravital dyes, whereby the same cells have differentiated into large cells filled with granules, the histiocytic differentiation.

Today we are concerned mainly with those diseases with implication of the reticulo-endothelial system where the histiocytic differentiation is prominent and on the other hand those in which hematic cell differentiation is fundamental.

Histiocytic Proliferation

Now, in typhoid fever, we will encounter in the first week of the disease, you might say about two weeks after the infection, a very striking alteration of the lymph nodes. The mesenteric lymph nodes are large, and if you examine them under the microscope, you will see that the small lymphocytes, which in the normal lymph nodes constitute the majority of the cells, are replaced to a great extent by the aggregation of other cells which differ very distinctly from the small lymphocytes. On higher power one can see these cells closer. This is the small lymphocyte with a dark nucleus almost completely filling the cell. The cytoplasm is just a rim around the nucleus. The majority of the cells, however, are different. They are very large compared with the small lymphocytes, have abundant cytoplasm and the nucleus is pushed to the periphery. These are the so-called typhoid cells which were described some eighty years ago by Rindfleisch in Germany, and were extensively studied in this country by Mallory, who already tried to give an explanation as to their origin and came to the conclusion that they belonged to the endothelial leukocytes. It is recognized today that the endothelial leukocytes of Mallory are part and parcel of the reticulo-endothelial system. Another feature which this picture shows is the fact that the large cells contain particles of nuclei which come from destroyed lymphocytes. We see then, in the typhoid lymph nodes not only the presence of these large cells, but also the evidence of destruction of lymphocytes and that their fragments are taken up by the large cells. This must stimulate our curiosity. That this alteration of the lymph nodes with the striking histiocytic differentiation of the reticulo-endothelial system is due to the action of typhoid bacteria is evident if one sees colonies of typhoid bacteria within the tissue.

We can say then, with reasonable certainty, that it is the typhoid bacillus or some of its partitions which are responsible for the proliferation of these cells. But there is still a great gap between the established fact of cause and the mode of action of this cause, the mechanism. We don't know how the typhoid bacilli provoke this proliferation of the histiocytes. But we have one evidence, which might be to a certain extent helpful in the explanation, although it is still a superficial one. We have seen already that there is a striking destruction of the lymphocytes which evidently precedes that marked proliferation of the histiocytic elements. One can say therefore that the lymphocytes must be in some way influenced by the action of bacteria or bacterial products, in short, that there is some relationship between the action of bacteria and the destruction of lymphocytes.

Another disease is also very strikingly characterized by a proliferation of these large cells, viz., an infection with a fungus, histoplasma capsulatum, a not too uncommon disease on the mainland. This disease was rather rare until 1926, and was reported mainly from Latin America; then began reports from all over the mainland; and in recent months, in the March issue of the *Bulletin of the U. S. Public Health Service*, there was a report from Kansas City according to which ten cases of histoplasmosis were found in Kansas City within a period of eighteen months. It is seen then that this disease is by no means rare. Coming to the histologic picture, you see something similar to typhoid fever. You see scattered a few lymphocytes that intermingle with large cells, and here a large area which consists entirely of the large cells. The characteristics of these cells are similar to the typhoid cells, again very large cells with the nucleus at the periphery. Under high power we see that these cells are loaded with microorganisms which can be recognized by their staining qualities and particularly by culture as Histoplasma capsulatum.

Certain protozoal infections are also characterized by the prominence of large histiocytes.

This is exemplified by the spleen in the case of kala-azar, in which large histiocytes can be seen loaded with parasites: Leishman-Donovan bodies.

In some viral diseases such as lymphopathia venerea, we also see proliferation of the reticulo-endothelial cells and their differentiation into histiocytes. There are many other maladies—including, of course, of great importance, leprosy—in which the outstanding diagnostic feature from the morphological point of view is the proliferation of cells of histiocytic nature; they are localized in certain forms only within the skin; in other forms they can be found scattered throughout the body, mainly in the liver and particularly in the spleen. There is, also, quite definite evidence of histiocytic differentiation and proliferation in tularemia and in Bartonella infections. All these infectious diseases are characterized by granuloma formation and nodules consisting of histiocytes. These are the morphologic features which we observe on microscopic study.

If we then inquire into an explanation from the functional aspect, we may say that it is universally agreed that the histiocytic stimulation of the reticulo-endothelial system in infection is in the nature of a defense reaction. But if you use this word, you immediately apply a teleologic concept and teleologic concepts are not progressive, I would say. It is helpful, for a while, to say that the body does something to defend itself and it might be correct if we look upon the morbid process as a battle between microorganism and host. But I don't think that we can progress very far with such a concept. The ultimate object of any investigation in medicine must be to break down the process into simpler happenings of chemical and physical nature. We must try in biology to come to the same recognition of the operation of the laws of the universe which govern the human body exactly the same way as they govern the planets. This is the ultimate object. For a while, however, we might be satisfied to interpret certain lesions in this more vitalistic way.

Antibody Formation

I think it is appropriate at this point of the discussion to make reference to the hypothesis proposed by many renowned investigators that the reticulo-endothelial system is the site of antibody formation. This concept originated in morphological observations. When one saw these marked proliferations of reticulo-endothelial cells in bacterial infections, which are associated with lasting immunity like that in typhoid, what was more obvious than to think that the immune bodies must have been formed by the proliferated reticulo-endothelial system? This concept was very popular, and for many years immunologists did experiments by which they tried to eliminate the activity of the reticulo-endothelial system. They tried to block the reticulo-endothelial system by injecting into the animal body a huge amount of intravital stain, hoping that in this way they could paralyze the reticulo-endothelial system; subsequently they tried to immunize these animals in the usual way. A number of authors reported that the rabbits which had been injected previously to their immunization with intravital dyes, were not capable of developing as high an antibody titer as the control animals. However, other authors did not reach the same results and their excuse, so to speak, was that one cannot reliably block the reticulo-endothelial system because it is so widely distributed that the intravital dye cannot reach all the cells. Consequently, attempts were made to introduce material which was toxic for the reticulo-endothelial system. Again the results were rather ambiguous. So we must say that the concept that the reticulo-endothelial cells are the producers of the antibodies was of a more circumstantial than direct nature. The most direct approach was used by Florence Sabin to prove this concept. She injected azo-proteins into the animal and could follow the fate of these dyed proteins within the animal body. She really saw the break-up of the protein within the reticulo-endothelial system and the shedding of cytoplasmic particles. From that she concluded that the reticulo-endothelial system must be the former of antibodies, since the destruction coincided with the maximal antibody formation.

Antibodies From Lymphocytes

Recent investigations of A. White and Dougherty at Yale, and Ehrich and Harris in Philadelphia, indicate that the lymphocytes are the actual producers of gamma globulin and of antibodies. I am sorry that I cannot enter here into a detailed discussion of the most excellent work of these groups of authors, who working in different places, came to the same conclusion; but I cannot refrain from mentioning one fact here, demonstrated by Abraham White and co-workers, who showed not only that the lymphatic tissue in the lymph nodes is responsible for or active in the production of gamma globulins and antibodies, but that the antibody and globulin formation is under the control of the adrenal cortex.

The following experiments were performed by them: they injected sheep cells into the rabbit and produced high titers of hemolysins; then they

left the rabbit alone for half a year, until the antibodies seemed to have disappeared from the animal's body. If they now injected an extract of adrenal cortex, antibody formation was reawakened. This points to a control of antibody formation by the adrenal gland. I think these findings are of far reaching importance not only for the theory, but also for the practice of medicine.

The disclosure that the lymphatic cells are probably concerned with the formation of antibodies rests, of course, mainly on experimental immunologic data. However, there is some support of the conclusions in histologic observations. If one examines the lymph nodes of animals that have been immunized by foreign protein or dead bacteria, one finds crucial changes within the lymph nodes; one finds in the first place destruction of lymphocytes. Then there is a regeneration of lymphocytes and a good number of lymphocytes become transformed into plasma cells.

Plasma Cells

The plasma cells have always attracted our attention. They have been known to occur in tissues in chronic inflammation. They have been considered a diagnostic criterion of chronic infection and granulomata. The plasma cell is characterized by a striking basophilia of the cytoplasm. This we have known for sixty years. Today the basophilia of the plasma cells has been established by Scandinavian investigators to be due to ribose nucleic acid; and we know from recent investigations that an increase of ribose nucleic acid is evidence of an active protein synthesis taking place within such cells. You can see then the morphologic point of view of the function of these cells. These disclosures do not detract anything from the importance of the reticulo-endothelial system in the defense of the human and animal body against infection. In fact, it might help to clarify the mechanism of the different tissue reactions in acute and chronic infection, which in a general way have been attributed to the state of altered reactivity of the infected host.

Dienes and Mallory reported some fifteen years ago that the tissue reaction in the tuberculin type of allergy is prominently of histiocytic character, in contrast to protein anaphylaxis in which polynuclear leukocytes abound. But it has been shown by German investigators, Roessle and Roulet, that in the later stages of the hypersensitive tissue reaction against foreign protein the histiocytes become the dominating cell type. They observed the development of histiocytic nodules surrounding the injected antigen. The development of histiocytic nodules in these experiments has therefore been considered the manifestation of the ability of the hypersensitive host of destroying or neutralizing the originally highly toxic antigen.

Accordingly, then, histiocytic proliferation has been regarded as the morphologic equivalent of an allergic immunity stage of the host. For instance, the striking proliferation of histiocytes in various organs as in the spleen and liver, and in the valvular lesions in subacute bacterial endocarditis, has been interpreted as evidence of an increased resistance to infection by streptococci. It is not inconceivable that the histiocytic stimulation of the reticulo-endothelial system in chronic infection is the result of degradation of the microorganism by antibodies formed outside of the reticulo-endothelial system, whereby chemical substances are liberated which activate the system. This hypothesis is suggested by the fact that the proliferation of epithelioid cells, which take their origin definitely from the reticulo-endothelial system, can be provoked by a lipid fraction of the tubercle bacillus, isolated by chemical extraction.

The tubercle bacillus contains the three components: lipid, protein and carbohydrate. If one injects the lipid fraction into the animal body, one can provoke the production of epithelioid-cell tubercles. These observations do not prove, of course, that the epithelioid cells in actual tuberculous infections are produced by the liberation of the lipid fraction. But one might imagine that the human or animal body which is capable of real defense against the infection will split the tubercle bacilli into these different fractions. The immune bodies of this animal will neutralize the proteins, and the remaining lipid fraction will stimulate the reticulo-endothelial system. These are hypotheses which have not been definitely proven, but which are reasonable. Now, the importance for our discussion is, that other lipids have been found to exert a similar local stimulating effect. If you inject cholesterol into an animal or if we see in the human body after lipoidal injection the development of epithelioid cells, we know that it is the lipid which provoked it.

The Lipoidoses

It seems therefore appropriate to discuss the morbid states of the reticulo-endothelial system characterized by its systemic proliferation in association with an excessive storage of lipids. This association was first recognized years ago by Landau and McNeil in Aschoff's laboratory. They called attention to the conspicuous presence of lipids in the Kupffer cells in diabetic lipemia and

in experimental hypercholesterolemia. The combined investigations of clinicians, biochemists and pathologists have brought forward an abundance of new facts. The morbid states characterized by generalized accumulation of lipid throughout the body with particular involvement of the reticulo-endothelial system are collectively referred to as lipoid storage diseases or in short, as lipoidoses. They are classified according to the type of predominant lipid, viz., cholesterol, sphingomyelin or kerasin, which correspond to the clinical and anatomic entities of xanthomatosis or Hand-Schüller-Christian disease, Niemann-Pick's disease and Gaucher's disease. Clinical and morphologic similarities unite Niemann-Pick's and Gaucher's diseases, although there are also significant dissimilarities, while the third group differs fundamentally in clinical and structural behavior.

Gaucher's Disease

The characteristic gross picture of a case of Gaucher's disease includes an enormously large spleen, sometimes up to ten pounds, somewhat yellow in color and containing characteristic large and smaller hemangiomata. The microscopic picture shows an accumulation of huge cells, seen exceedingly well with Mallory trichrome stain. The cells are enormously large and have the characteristic features of histiocytes: a relatively small, indented nucleus, and a large amount of cytoplasm. If one stains these cells with Sudan or Lawrence Smith-Dietrich stain, they do not give lipid reaction at all. The lipid cannot be demonstrated with the usual conventional histochemical methods.

There is one point I want to stress because it pertains to certain fundamental observations, regarding the reticulo-endothelial system, which are based on findings in the human and not in the animal body. If one sees these nodules of large cells and if one tries to localize them within the structure of the spleen, one might think that they fill the sinuses of the spleen. That this is not true is very well shown if one stains sections of the spleen for iron. Then one recognizes that the sinuses are exceedingly well outlined because now one sees the endothelial cells labeled by the presence of iron; one realizes that these nodules are located between the sinuses and therefore, could not have originated from the endothelial cells. It indicates very clearly that the endothelial and the reticulum cells of the spleen, while apparently identical according to the definition of the reticulo-endothelial system, are different in function, at least in reference to lipoid storage. Now, we find that the same cell proliferation is present in the liver; the same cells are also present within the bone marrow; and we all know one can make the diagnosis of Gaucher's disease in life by bone marrow aspiration. Chemical examination by Lieb of the Gaucher spleen has identified the lipid as kerasin, a compound of lignocerin, sphingosin and galactose. Recent investigators reported the combination of glucose and lignocerin in two cases of Gaucher's disease. This I only mention for the reason to show that we are now very familiar with the type of fat which is accumulated in Gaucher's disease. But we have no information yet as to why this lipid is accumulated within the cells.

It was about twenty years ago when Professor Ludwig Pick, one of the investigators who contributed so much to the recognition of this disease, spoke in New York and other parts of the country and expressed the opinion that the abnormal lipids in these diseases are accumulated within the reticulo-endothelial system in the same way as the colloidal dyes are deposited after experimental injection. This is obviously not so, because neither in Gaucher's disease nor in Niemann-Pick's disease can we find any evidence of increased lipoid content of the blood. The accumulation of kerasin is now interpreted by chemists, but only interpreted, as the manifestation of a disturbance of the intracellular metabolism of the reticulo-endothelial system, which has been considered the site of kerasin production. Under physiologic conditions, the lipid is transported to the cerebrospinal system where it is finally transformed into the cerebrosides of the neural tissue. In Gaucher's disease the transportation is arrested and the kerasin accumulates within the reticulo-endothelial system. This is a hypothesis, but it is well supported by the fact that a cerebral disturbance, viz., atrophy, is found only in the infantile form of Gaucher's disease, because of the greater cerebroside requirements of the undifferentiated brain tissue than that of the adult.

But we have to say that chemists have not yet given us any explanation as to the reason why the kerasin accumulates in the cells. We have to wait for future cases of Gaucher's disease, in which the chemist may search for certain enzymatic derangements. One has to be aware of the problem, and one has to be prepared at the moment when one gets human material to immediately start the investigation. This, I would say, is one of the main reasons why one tries to interest investigators in other fields of biology in morbid anatomy and to make it clear to them that we are not only concerned with the structural facts, but that we also want to know the dynamics. We have to have a definite plan how to use human patho-

logic material for these complicated investigations. There is another structural fact that we cannot neglect. The proliferation of the reticulo-endothelial system evidenced by the enormous size of the splenomegaly points also to an associated growth disturbance and this remains still completely unexplained. It might be mentioned here, and I think this is of significance, that the injection of the lipids isolated from cases of Gaucher's and Niemann-Pick's disease leads to a temporary accumulation within the reticulo-endothelial system, but does not provoke a proliferation of the cells. In other words, if one injects the material then it is removed from the bloodstream and deposited in the reticulo-endothelial system; but the reticulo-endothelial system cells of the rabbit, being perfectly normal, do not further proliferate; this is also evidence that one cannot conceive of the morbid mechanism in Gaucher's or Niemann-Pick's disease as a simple intravital removal of colloidal material.

Niemann-Pick's Disease

Now, as to the morphologic features of Niemann-Pick's disease: If we examine the bone marrow, for instance, there is some difference and one should call attention to these subtle differences. The cells in Niemann-Pick's disease are vacuolated, in contrast to the cells in Gaucher's disease. Otherwise, however, they look very similar, and that is the reason why, years ago, Niemann-Pick's disease was confused with Gaucher's disease. We find lipid not only in the organs of the reticulo-endothelial system, but also in other organs. We see the same substance accumulated in the liver cells, within the renal epithelium, and within the thyroid, which indicates that the disturbance of lipoid metabolism in Niemann-Pick's disease is much more extensive than in Gaucher's disease. In Gaucher's disease, the disorder of lipoid metabolism, which is probably due to some anomaly of enzymatic katabolism and anabolism of the lipoid substances, is limited to the cells of the reticulo-endothelial system, while in Niemann-Pick's disease, all the cells of the body, or the majority of them, participate.

Amaurotic Familial Idiocy

It might be appropriate here to dwell for just a moment upon amaurotic family idiocy. We find in Niemann-Pick's disease, in contrast to Gaucher's disease, very definite alterations of the nerve tissue, viz., ballooning of the ganglion cells in the brain and also the sympathetic ganglion cells. This is also characteristic of amaurotic family idiocy, and chemical examinations have shown that there is a similarity, but not an identity, of the fat. Nevertheless, one could raise the question whether amaurotic family idiocy is not a disease in which the reticulo-endothelial system is also involved. I have examined the internal organs in a number of cases of amaurotic family idiocy, and I have never seen any evidence of lipoid storage outside the brain.

Chondro-Lipoid Dystrophy

Another malady has come only recently into our vista and that is gargoylism or chondro-lipoid dystrophy, which shows neural changes resembling those in amaurotic family idiocy. One case which we examined only recently showed the characteristic facies of a patient with gargoylism: large head and short neck; the resemblance to the gargoyles in Gothic cathedrals is the reason for the term. Now it has been known for several years that in gargoylism the ganglion cells show a picture of ballooning similar to that of amaurotic family idiocy. But in addition we find interesting alterations in the internal organs. In the spleen we observe ballooning and vacuolization of endothelial cells. Very interesting and important is the fact that the histiocytes within the connective tissue show the same vacuolization; and the accumulation of such cells in the blood vessels—for instance, the carotid artery and aorta—leads to formations which resemble arteriosclerotic plaques. But the nature of the material which is deposited within these cells has not yet been established. We submitted material from this case for chemical examination, but have not received an answer. Histochemical examination did not reveal fat.

Hand-Schüller-Christian Disease

I would like now to discuss very briefly the xanthomatoses, in particular the characteristic anatomic and histologic findings in Hand-Schüller-Christian disease. Hand-Schüller-Christian disease shows extensive xanthomatous infiltrations in the skeleton. If present in the base of the skull, they are responsible for exophthalmos and for the symptoms of diabetes insipidus. But this is not the only location of the xanthomatous lesions. They are very commonly found in the dura mater, and in the falx cerebri, but are also extensive sometimes in the pleura and in the retroperitoneal tissues, especially around the kidneys. The tumor formation in the dura mater and in other parts of the body is characterized by its yellow color and firm fibrous consistence. On histological examination the disease is distinguished by the accumulation of large histiocytes containing cholesterol, and by fibroblastic proliferation.

Dr. Rowland, who did so much for the classification of these diseases, expressed the belief that

it is an anomaly of cholesterol metabolism which leads to the accumulation of fat within the histiocytes; in other words, that it is the cholesterol which is the stimulus for proliferation of histiocytes and brings about the characteristic histiologic picture. Pathologists have never been friendly to this concept, and the reason why we could not accept it is this: if one examines the early lesions in Hand-Schüller-Christian disease—if one looks for the beginning, which is the only way, generally speaking, in which one can come to a conclusion as to the evolution of a disease—if one tries to find such alterations which are very small so that one can hardly see them with the naked eye—then one notices that the initial lesions are characterized by the accumulation of histiocytes which do not contain fat. This has made us suspicious of the idea that Hand-Schüller-Christian disease belongs to the primary lipoid storage diseases.

Now we have a malady which occurs in young infants and probably is the link and the clue for the understanding of Hand-Schüller-Christian disease. A child of twelve months was admitted in a very severe febrile condition and showed a very characteristic maculo-papular skin eruption. At autopsy we found generalized lymph node enlargement, and the spleen and liver were markedly enlarged and infiltrated by nodules. These were the main gross findings. Histiologically the spleen showed nodules around the central arteries, composed of reticulo-endothelial cells. In the lymph nodes were the same nodules. Under higher power these cells showed indented nuclei characteristic of histiocytes. We can say that these are histiocytic granulomata. Now when we examined again at random small lymph nodes, we found mostly the characteristic histiocytic granuloma development without lipoid. However, in one of the lymph nodes, merely accidentally, we found —in addition to the proliferation of such histiocytes—an accumulation of lipoid-containing histiocytes. We can then state that this was a case in which one could see the transformation of an originally non-lipoid histiocytic granuloma into a lipoid histiocytic granuloma. This, however, is not the only case. Another case was observed by Drs. Freund and Ripps some years ago: a patient, just five months of age, showed large lymph nodes in the neck. One lymph node was removed and showed this development of a non-lipoid histiocytic granuloma with giant cells of striking size. At that time the bones seemed to show no lesions, whatsoever, on Roentgen examination. The child was readmitted a few months later and at that time the skeleton showed definitely the geographical destruction of the skull bones, particularly characteristic of Hand-Schüller-Christian disease. When the child came to autopsy—it died of appendicitis—we found in some areas in the anterior mediastinum a granulomatous picture similar to what we had seen before; in other areas, however, characteristic pictures of Hand-Schüller-Christian disease were found.

Now there is additional evidence for that evolution, and this is particularly one case published by Drs. Thompson and Page in New York, a case which was typical of Hand-Schüller-Christian disease in every way. The lesions in the bones and dura mater were characteristic. However, within the spleen there were nodules which were not lipoid-histiocytic at all. In the skin—and 25 per cent of cases of Hand-Schüller-Christian disease show skin eruptions—one found non-lipoid containing cells of histiocytic type. I think from these observations one can reach the conclusion that Hand-Schüller-Christian disease begins with proliferation of histiocytes in granulomatous form without lipoid, and that the cells of this granuloma, due to a disturbance of their lipoid metabolism, become secondarily lipophages.

The disease which is characterized by the generalized skin lesions and the marked lymph node enlargement is commonly referred to as Letterer-Siwe's disease or non-lipoid histiocytosis; but it is probably the early and rapidly advancing phase of Hand-Schüller-Christian disease.

The evolution of these cases, which could be recognized only by a careful morphologic examination, seems to indicate quite clearly that Hand-Schüller-Christian disease should be taken out from the group of primary lipoid storage diseases. The anomaly of lipoid metabolism is secondary. Again, of course, the great question remains: What is the morbid process? Here morphologic investigation will only be able to suggest a hypothesis and to guide further investigations.

Conclusion

What I wanted to demonstrate by my discussion today was that there is still some value in old-fashioned morphologic investigation of disease. The problem of the disease processes can be focused by exact morphologic investigations. But the histologist must be aware that his method does not supply the final answer to account for the evolution of disease. He must invite the aid and cooperation of other branches of biology for completion of the scientific investigation of human disease. His main contribution is exact observation of the alterations of structure and a sincere desire to understand their evolution.

Statistics and Community Health

NILS P. LARSEN, M.D.
HONOLULU

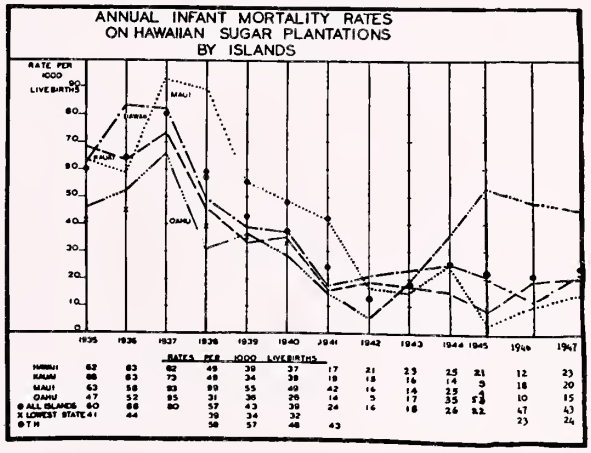
CAREFUL ANALYSES of the health conditions on sugar plantations have been made since 1929. Annual reports on these analyses have been presented to the directors, managers and doctors of the H.S.P.A. since 1933. The old saying "Lies, damn lies and statistics" was carefully kept in mind in the attempt to try to make health statistics more valuable and applicable as a measuring rod of health conditions in a given community.

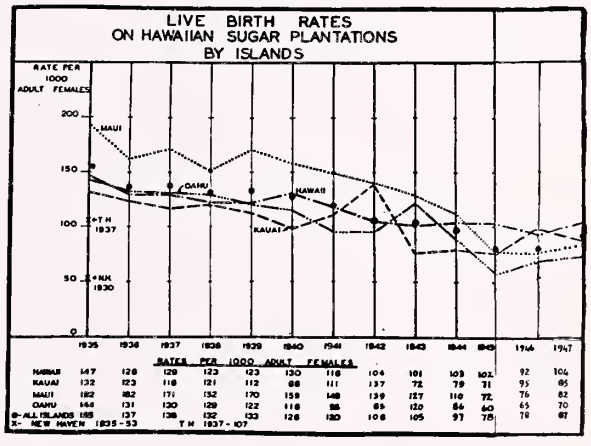
In the daily life of a plantation doctor, tabulating and reporting all illnesses according to the new nomenclature would become too difficult a chore. It would not be a practical measuring rod for field health evaluation. For instance, last year the 12,349 cases admitted to The Queen's Hospital were classified under several thousand different headings. After considerable trial and error certain minimum, basic figures that could be counted upon to be accurate were decided upon. These were used as an index of health "from the cradle to the grave."

Some of these, we now realize, are probably not essential. Some were inserted from a research standpoint, and still others were used to try to evaluate the seriousness and acumen of the examining doctor. Presented herewith are 10 of the more basic graphs covering a twelve-year period. Annual reporting was required on a total of 72 items. These were not all charted on graphs, but all were reduced to rates, so that all the plantations and all the islands could be compared with one another. In this way an excellent check and counter-check was established to control any out-of-line reporting. The reports are submitted monthly by 29 health centers and cover 73,000 men, women and children. At the start of the twelve-year observation period the population figure was over 100,000.

This idea of a practical index of health to be used in the field was first presented at an International Conference in Indo-China, and published in the proceedings of the Far Eastern Association of Tropical Medicine in 1939. Since then a definition of each item has been printed on each monthly summary sheet to enable the workers in the field to use the same terminology. Although it is too much to hope that this idea registered 100 per cent, the fact that each island has from five to ten diagnostic centers and that every center is compared with the others decreases the margin of error.

The infant mortality, birth rate and maternal morbidity and mortality were used for the evaluation of infant and maternal care. Last year there was a total of 1,162 births without a maternal death. The infant mortality during that year was 24. It will be noted that ten years ago the rate was 80, and the Filipino rate in 1923 was 266.

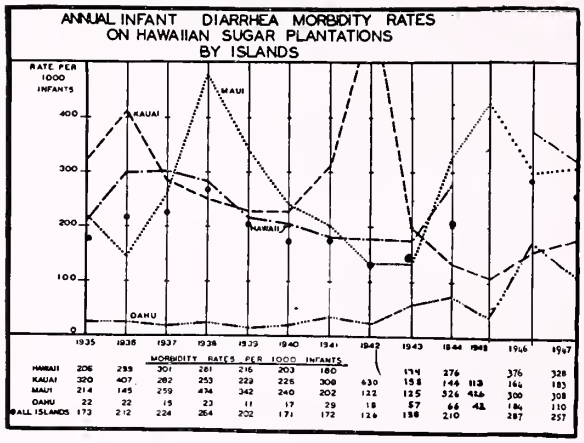


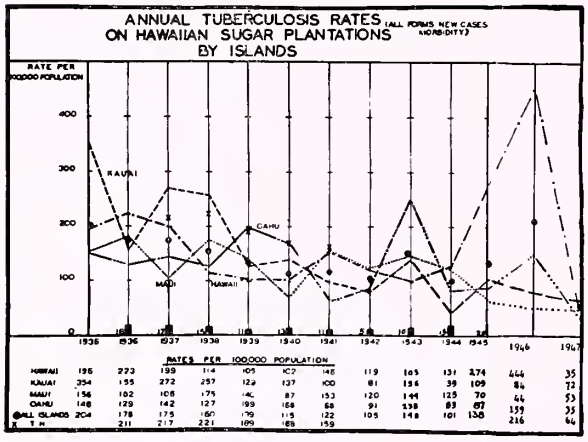


The infant diarrhea curve is often given with infant mortality. Here we see considerable variation. The peaks are associated with epidemics, but last year no infant died from this cause. This indicates a safe milk and water supply; also that the weekly infant clinics pay dividends.

The tuberculosis curve, perhaps the second most important common index of health, shows a drop

Read before the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 7, 1948.





in incidence of new cases from 200 to 64. The death rate in tuberculosis was never used since formerly sufferers of this disease often went back to their home countries, and many now, as soon as diagnosed, are transferred to sanitaria.

The common infectious diseases run their usual cycle of high and low years. The only value of their tabulation is to check that they remain low and that no one disease is predominant.

The parasite count is kept both as to infestation and as to the rate of those ill from parasites. We have seen hookworm practically disappear, and yet at one time as high as 92 per cent of the Filipino laborers were reported infected with hookworm.

To evaluate surgery, the rate of appendicitis, hernia and all other major operations is recorded. The drop toward a common level during the years of recording suggests improvement in surgical evaluation. Last year 254 appendices were removed with two deaths, and 320 other major surgical operations were performed with two deaths. This is a death rate of 0.4 per cent.

An attempt is made to evaluate middle age diseases and cancer. No graph has been kept but the percentage indicates the same approximate average incidence of these conditions as found in studies made on the mainland.

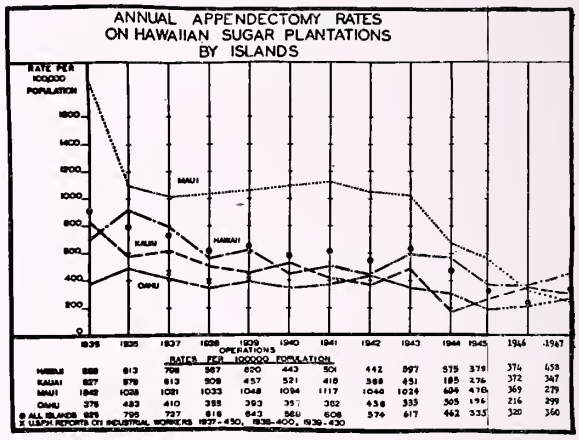
The accident rate curve (accidents serious enough to require hospitalization) shows a marked drop after 1937 when a drive was begun on accident prevention. A change on Oahu from 2,400 to 600 clearly illustrates what can be done after attention has been focused on an abnormal rate.

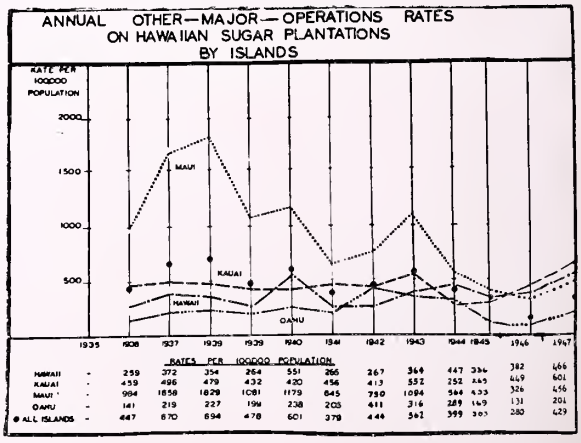
The arthritis curve and the upper respiratory rates were kept to check the relationship of rainfall to monthly incidence. The evident variety of differences in diagnosis of these items has to date made it impossible to use these figures.

The pneumonia rate and death rate were compared to those in the states and indicate that the plantation doctors used the new sulfa and penicillin drugs properly as soon as these appeared.

Mental health was evaluated by the rate of commitments to mental hospitals, the suicide and homicide rates. Since these were relatively low we assumed the mental environment was not oppressive.

The daily clinic curve was used to evaluate the extent to which doctor and hospital services were used. The rate was above that of a well

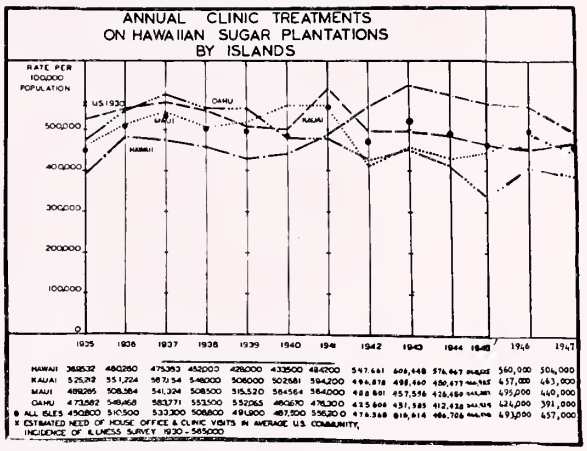


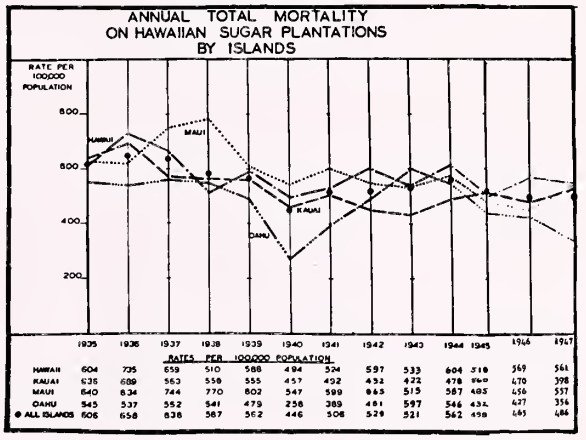


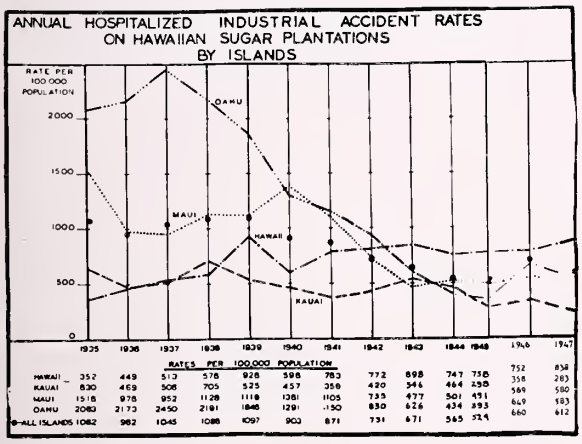
organized U. S. community (4.6 calls per person per year). The hospital figure also indicated more than average use in that 92 per cent of the babies were delivered in the hospitals. The surgical rate was 9 per 100 against 7.5 for the mainland, the hospital rate 34 per 100 as against 8 and the average hospital stay 3.6 as against 9.7 on the mainland, indicating a free and quick use of hospitals.

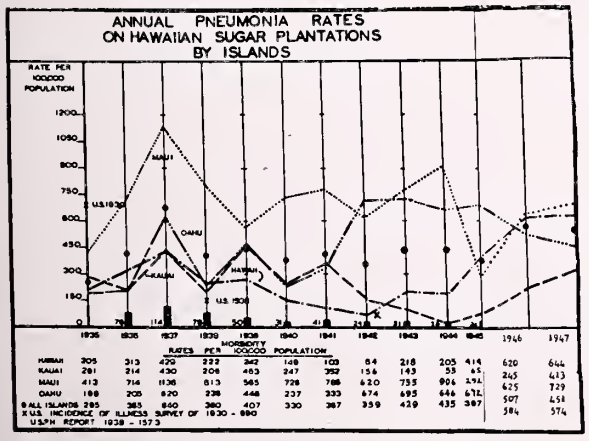
The death curve 4.9 is unusually low, but we must remember the average age of plantation people is low. However, since the death rate in Honolulu in 1900 was 25, a present rate of 5 among plantation laborers indicates an improved health environment. All improvement in health was not due to climate!

The accompanying graphs indicate the comparison of each of the four islands against the total islands as indicated by the large dots. We know of no similarly large group of rural people where comparable records are kept. Last year while in British Columbia and Alaska an attempt was made to get corresponding figures. Very few were available. The figure of 92 for infant mortality in Alaska and 154 for the Indians of British Columbia compared with our 24 suggested if









these areas would blazon forth and explain their figures, corrections would soon be made. Full publicity of any evil or danger usually corrects it.

We have spoken of "the power of the health graph." By that is meant that these simple graphs repeated annually will create enough interest to bring about correction. It has been attempted on the plantations, and today the plantation people present a better health curve than any comparable group in the world. Careful tabulation and reporting is only one of the reasons for the improvement, but we believe it is important enough to suggest that similar figures be kept and tabulated by other communities. Health statistics properly and constantly used can have a definite relation to the health improvement of a community.

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Discussion

DR. P. HOWARD LILJESTRAND—Some comprehend statistics quickly; some slowly. I have been on the dull side for years until a recent trip to the mainland sharpened my appreciation of the significance of these plantation statistics. As an ex-plantation doctor, I am interested in and sympathetic with the problems involved, and yet at

the same time I can look at them with a new perspective. Also, being at ill-fated Aiea, I have seen a plantation community before and after liquidation of the plantation; and hence before and after the discontinuation of complete medical care for most of the community. After the plantation folded, we had many, many people who discontinued previous treatment or refused to continue treatment which they acknowledged they should have, because they were so acutely aware of the necessity for paying for treatment which they had previously received free. I am now completely convinced that the population in general gets far less medical care than it needs and can use, because of fee for service payment. It is true that plantations have a high rate of office calls and a high rate of hospitalization, but Dr. Larsen's figures indicate that it pays off in good health.

The backbone of the plantation medical system is a group of outstandingly able general practitioners. There is no relationship between a mainland general practitioner and a Hawaiian plantation general practitioner. Before I learned this, I would answer queries on the mainland by saying that I was doing general practice on a Hawaiian plantation. The doctor would change the subject with raised eyebrows. I finally realized that on the mainland a general practitioner is apt to be regarded as a third-rate internist combined with a midwife. In an emergency he may sew up a laceration, but for something as complicated as cautery of the cervix he will send the patient to a surgeon. My wife's aunt, who lives in Iowa, had to travel 160 miles to get to a place where a surgeon could pin her fractured hip, even though she lived among a thick network of moderate sized communities.

The plantation physician, on the other hand, is able to handle 98 per cent of the demands well. I have seen plantation physicians pin hips and do gastrectomies, as well as run a dispensary and practice dermatology, etc. Though he may do one procedure seldom, he will do it well because he looks it up thoroughly before each occasion. The expert, on the other hand, who is thoroughly familiar with the procedure, will seldom look it up and as a result may be way behind on new developments or may make the same mistake many times before he realizes it. The plantation physician exercises great discretion, however. If he is not sure in his own mind that he can do a procedure without unduly endangering the patient, he will get help.

Seeing all this, I conclude that specialization has been far overdone, particularly when it comes to small groups of specialists telling the rest of the profession that they, as non-specialists, cannot do thus and so. In general, what a doctor may do should lie between the patient, the doctor, and his conscience. The patient may refuse to go to anyone, or he may go to a chiropractor or other cultist. Outside the profession, it is his business. But within the medical profession, one doctor says to another, "You may not treat this patient. You are not qualified." Thus, doctors themselves are developing a regimentation alongside of which much of "socialization" looks pale. Such restriction is obviously growing, despite the vehement denial of one of the five members of one of the American Boards, whom I met on the boat. Long residencies, of course, serve some good purposes, but also they constitute a dilute and wasteful training which provides a lot of free help for hospitals.

The record made by the plantation surgeons indicates the fallacy of exaggerated ideas of specialization. We all have to thank Dr. Larsen for persistently publicizing this remarkable plantation result. Such publicity is public relations of the best sort and it has not cost anyone $33,000.00.

Pleural Effusion

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THE TERM "effusion" as herein used includes transudates and serous exudates. It does not include empyema, pure hemothorax, or the serous exudate which so commonly accompanies artificial pneumothorax. The etiology of these latter conditions is usually evident or readily determined and, as a rule, presents no problem in differential diagnosis. This paper is concerned chiefly with factors involved in the pathogenesis and differential diagnosis of pleural effusions. Treatment will be given special consideration only in connection with tuberculous effusions. Within the limits of the present definition, nearly all cases of fluid in the pleural space may be classified under four great etiological headings: tuberculosis, malignancy, heart failure, and the nephrosis syndrome. Aside from these "big four," a great many miscellaneous conditions may occasionally be the cause of pleural fluid. Consideration of these conditions in the differential diagnosis will be necessary only if one of the big four cannot be incriminated.

Tuberculous Pleural Effusion

It is one of the best known clinical facts that fluid in the pleural space is commonly the result of tuberculous infection. James Alexander Miller[1] states that pleural effusion is the initial clinical feature in about one out of every four cases of pulmonary tuberculosis. He also asserts that between one-third and one-half of all adults with pleural effusion develop obvious pulmonary tuberculosis within the following few years. Other observers give a somewhat lower incidence. Kraetzer[2] states that "serous effusion actually means tuberculosis in about 100 per cent of cases." Certainly most authorities will agree with this assertion when it is applied to those cases of effusion which develop abruptly in an otherwise apparently healthy individual.

Boyd[3] makes the following comment on the examination of pleural fluid for tubercle bacilli: "Aschoff and other workers have obtained successful results in as many as 70 to 85 per cent of cases. When it is remembered that in pleurisy complicating lobar pneumonia it may be impossible to demonstrate the pneumococcus, these high figures in a group of unselected cases afford eloquent evidence of the great part which the tubercle bacillus plays in the production of this condition." Unfortunately, in general clinical practice the results are not as good as this. Even in cases of pleural effusion associated with known pulmonary tuberculosis, it is not always possible to find bacteriological evidence of the disease in the pleural fluid. Such failure does not necessarily mean that tuberculosis is not the cause of the effusion. However, it does raise the question, Why do we frequently fail to recover tubercle bacilli from an effusion known to be associated with an active pulmonary infection, or from an effusion in an individual who subsequently develops an evident pulmonary lesion? It seems most probable that factors in the pathogenesis of tuberculous pleural effusion provide the answer.

The pleura consists of four layers, mesothelial, submesothelial, elastic, and areolar. The latter, often referred to as the subpleural or subserous layer, is peculiarly rich in blood vessels and lymphatics and, as shown by W. S. Miller,[4] is a favorite site for the development of tubercles. It is important to realize that in tuberculous pleural effusion the reaction originates *within* the pleural structures. The effusion is secondary to the reaction *within* the pleura. It will help one's conceptions in the following discussion to remember that the condition we are dealing with is not simply an effusion but a *pleurisy* with effusion.

In 1917 Paterson[5] demonstrated that the development of a pleural effusion following the injection of tubercle bacilli into the pleural cavity of a guinea pig depended on previous infection, i.e.: sensitization, of the animal. Petroff and Stewart[6] injected old tuberculin into the peritoneal cavities of guinea pigs previously sensitized by killed tubercle bacilli. Serous effusions developed not only in the peritoneal cavity but also in the pleural cavity. Similar results were obtained

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[1] Miller, J. A.: Pulmonary Tuberculosis in Adults and Children, New York, Thomas Nelson & Sons, 1939.

[2] Kraetzer, A. F.: Procedure in Examination of the Lungs, New York, Oxford University Press, 1935.

[3] Boyd, W.: The Pathology of Internal Diseases, Philadelphia, Lea & Febiger, 1935.

[4] Miller, W. S.: The Relation of the Pulmonary Artery to the Place of Development of Tubercles in the Human Lung, Tr. Natl. Tuberc. A., page 219, 1930.

[5] Paterson, R. C.: The Pleural Reaction to Inoculation with Tubercle Bacilli in Vaccinated and Normal Guinea Pigs, Am. Rev. Tuberc. 1: 353 (Aug.) 1917.

[6] Petroff, S. A., and Stewart, F. W.: Immunological Studies in Tuberculosis, J. Immunol. 10: 677 (July) 1925.

by Howard and DeVeer.[7] The results of this experimental work have been interpreted as indicating that allergy to tuberculotoxin is a dominant factor in the production of tuberculous pleural effusions. The physician who has used the Mantoux test at all extensively knows that a very tiny dose of tuberculin can cause an extensive, edematous, local reaction in a highly sensitized person. Visualization of such a reaction diffused over the pleura leaves little room for doubt that a pleural effusion would be one effect. In the light of the experimental work of the above investigators, it would seem that an effusion could have its inception in a localized subpleural focus, the general, allergic, pleural reaction following upon the liberation of tuberculotoxin and a few bacilli into the pleural space from the localized focus.

The basic features of allergy and immunity in tuberculosis are evident in "Koch's phenomenon," the reaction to re-infection. If a guinea pig which has not been previously infected is injected intracutaneously with tubercle bacilli, a papule forms at the site of inoculation. This breaks open and forms an ulcer. A generalized dissemination of bacilli occurs and the animal eventually dies, the ulcer remaining unhealed to the end. Now, if a guinea pig which was initially infected six weeks previously is again inoculated or reinfected, the reaction is, in Koch's words, totally different. A localized, flat swelling surrounded by an area of hyperemia develops—as in the positive Mantoux reaction. A necrotic ulcer forms at the center of the reaction, but in this case the ulcer heals quickly. The striking feature is that the reinfecting bacilli are "fixed" locally. There is no dissemination of bacilli, not even the neighboring lymph nodes becoming infected.

In discussing this epochal pathogenetic observation, Kayne, Pagel, and O'Shaughnessy[8] state, "Koch's phenomenon is obtained not only in the skin but in all the tissues of the body: for instance, in the mucous membranes, in the pleura and peritoneum, in the lungs (after intratracheal or intrapulmonary reinfection), and in the liver. It shows a sequence of hypersensitivity and immunity.

"The most striking fact about the immunity is the disappearance of the injected bacilli: only a very few, mostly disintegrated, bacilli are detected in the area of reinfection. This finding has been attributed to the intense inflammation and mobilization of cells, the effect of which might be to cause a mechanical barrier to the passage of the bacilli from the area of infection, or to produce an increased lysis of the bacilli. Such a lysis phenomenon has actually been seen after reinfection . . . it is particularly obvious when reinfection has occurred into a lymph sac, such as the peritoneal or pleural cavity." Kayne, Pagel, and O'Shaughnessy elaborate further on this theme, but the above quotation will serve the present purpose.

A tuberculous pleurisy with effusion represents a Koch reaction involving the pleura. Both the allergic and the immunologic phases of the reaction help to explain why tubercle bacilli are difficult to find in the effusion. It may be that in a very few tuberculous effusions no bacilli at all gain entrance to the pleural sac, the reaction being due to diffusion of tuberculotoxin from the pulmonary parenchyma and, particularly, from that site of predilection for tubercle formation, the subpleural lymphatic plexus. Or, in a highly sensitized person, a massive effusion may be associated with the actual invasion of the pleural space by a very few bacilli. These, diluted by a quart or more of fluid, may be very difficult to find. This dilution is a consequence of the allergic element in the reaction. That the immunity factor limits the number of bacilli present in the effusion is directly evident from the above remarks by Kayne, Pagel, and O'Shaughnessy. Of practical consideration is the logical deduction that the longer one waits before withdrawing fluid for examination, the greater will be the difficulty of demonstrating bacilli. It is a significant fact that it is very rare for a tuberculous effusion to develop into a tuberculous empyema unless it has been aspirated and replaced with air or unless it develops as a complication of artificial pneumothorax. Spontaneous pleural effusions almost invariably resolve. This is quite consistent with one of the above noted features of the Koch reaction, the local fixation and destruction of tubercle bacilli. The difficulty of demonstrating tubercle bacilli in pleural effusions should make one all the more mindful of the rule that a pleural effusion is to be considered tuberculous until proved otherwise.

Because tuberculous pleural effusions are not infrequently mismanaged with serious consequences to the patient, the principles of treatment are herewith presented in some detail. Self-evident as these principles appear to be, I frankly admit they reverse some of the opinions I myself held a decade ago. In the treatment of tuberculosis today much more attention is being given to conservation of pulmonary function than formerly was the case. The treatment of a tuberculous pleurisy with effusion involves two problems, the treatment of the effusion *per se* and the treatment

[7] Howard, T., and DeVeer, J. A.: Experimental Tuberculous Allergic Serositis and Its Relationship to Human Polyserositis, Am. Rev. Tuberc. 33: 755 (June) 1936.

[8] Kayne, G. G., Pagel, W., and O'Shaughnessy, L.: Pulmonary Tuberculosis, New York, Oxford University Press, 1939.

of the invariably present, underlying pulmonary tuberculosis.

The effusion should be aspirated as completely as possible, but not necessarily at one operation, as soon as the fluid has reached maximum development. This is usually within a few days of the onset of symptoms. If the fluid is tapped too early, the aspiration may have to be repeated. The reason for early aspiration is as follows: in a tuberculous effusion the visceral and parietal pleura become coated with fibrin. If the visceral coating is allowed to organize during slow, natural reabsorption of the fluid, the lung volume may be permanently reduced and the "re-expansion" of the lung may be at the expense of some reduction in the size of the hemithorax. On the other hand, there are no contraindications to early re-expansion of the lung.

No air should be allowed to enter the pleural cavity accidentally during the aspiration, and none should be introduced deliberately with the idea of "converting" the fluid to an artificial pneumothorax. The accidental or careless admission of air during aspiration defeats the prime purpose of aspiration, namely, early, full expansion of the lung aimed at preserving maximum respiratory function and minimizing contraction of the hemithoracic boundaries. Conversion of the effusion to an artificial pneumothorax with the idea of treating the underlying parenchymal lesion is no longer considered good therapy. Such a pneumothorax is often accompanied by adhesions, often complicated by tuberculous empyema, can seldom be maintained for an optimum period because of adhesions, empyema, or obliterative pleuritis, and results in thickening of the visceral pleura while the lung is under collapse. This latter consequence may result in an unexpandable lung, possibly a permanent pneumothorax space, and, eventually, contraction of the parieties, retraction of the mediastinum, and compensatory emphysema of the opposite lung. The patient is almost certain to be left with a much greater reduction in his vital capacity than if his effusion had been aspirated at an early date without air replacement.

Even the presence of a gross lesion in the lung, such as a cavity, does not warrant the conversion of a pleural effusion to an artificial pneumothorax. The chances of being able to maintain the pneumothorax for a length of time sufficient to control the parenchymal lesion are small, while the chances of severely crippling the lung by the consequences of treatment are great. If active treatment of the parenchymal lesion is indicated in these cases, pneumoperitoneum with temporary phrenic nerve paralysis is preferable to pneumothorax. If pneumoperitoneum and phrenic paralysis are not considered adequate, a primary thoracoplasty may be the treatment of choice. Even the institution of phrenic paralysis and pneumoperitoneum following complete aspiration of an effusion should be avoided if possible. Symphysis of the visceral and parietal pleurae invariably follows reapposition after absorption or aspiration of the effusion. If symphysis takes place while the hemidiaphragm is elevated, the paralyzed leaf of the diaphragm tends to become fixed in a high position. This not only means a permanent reduction in the size of the lung and considerable impairment in the eventually restored function of the diaphragm, but also a decrease in the efficiency of costal respiration in the lower part of the chest.

Massive effusions which are causing dyspnea and displacement of the mediastinum should be aspirated in stages at the first opportunity.

It is an interesting fact that once a tuberculous effusion has been aspirated without air replacement it seldom recurs. This is in marked distinction to effusions which are aspirated and replaced with air, and to effusions which develop during the course of artificial pneumothorax. Here repeated aspirations are often followed by repeated recurrences of fluid. No doubt, tension on adhesions in the presence of pneumothorax is responsible for the recurrence of fluid in many of these cases. Perhaps the chief reason a simple tuberculous effusion does not often recur following a single aspiration is that the reaction in the pleura is essentially an allergic and time-limited process, not the result of a progressing infection. A tuberculous pleural effusion may be very slow in resorbing if not aspirated, probably due to the layer of fibrin which coats the pleura. It might well be, of course, that non-recurrence of fluid following aspiration is also related in part to the fibrin coating of the pleura, although the reason suggested above is probably the more important. In any event, such non-recurrence has a highly diagnostic significance since it tends to distinguish a tuberculous effusion from one due to malignancy, heart failure, or renal disease.

It is stated in the text-books that a tuberculous effusion is occasionally persistent and recurs repeatedly following aspiration. Such cases in my experience have always been due to one of two causes, an associated atelectasis or a failure to aspirate the fluid at an early date in an effusion associated with a heavy fibrinous deposit on the pleura. In either case the pleura becomes thickened while the lung is in a state of partial collapse. The thickened pleura encloses a space

which, because of the rigidity of its walls, cannot become obliterated and hence retains its fluid. In such cases the fluid often insidiously develops into a tuberculous empyema with remarkably few constitutional symptoms. When such a rigid-walled space is aspirated without air replacement a high negative pressure develops within it and it soon refills with fluid.

In many cases of tuberculous pleurisy with effusion no parenchymal lesion can be demonstrated by the x-ray. The physician sometimes draws the inference that the disease is "primary" in the pleura. Having so assured himself, he hopes the disease will not develop in the lung proper. Both his inference and his hope are ill-founded. In the first place, the pleura is an integral part of the lung. If it is infected with tubercle bacilli, the patient already has pulmonary tuberculosis. According to William Snow Miller[9] a tuberculous effusion is invariably secondary to tuberculosis of the lung or hilar lymph nodes. Schuman[10] states that Jacobaeus was able to observe pleural tubercles through the thoracoscope in 80 per cent of cases of "primary" pleural effusions. In all cases of tuberculous pleural effusion where the x-ray reveals no parenchymal lesion, it is sound to assume that active, although invisible, subpleural tubercles are present. To quote from a previous article,[11] "It is far more pertinent, then, to state that *all* patients with a 'primary' tuberculous effusion *have* pulmonary tuberculosis, than to state that a certain number will *eventually* develop pulmonary tuberculosis. If it is accepted that all these patients *already have* active pulmonary tuberculosis, and already have advanced the first step toward potential, full-blown phthisis, the indicated treatment leaves no room for controversy. It will be the treatment of active pulmonary tuberculosis."

It may be well at this point to make a few remarks on thoracentesis. I had aspirated a great many pleural effusions with no untoward results. It seemed that the admonition in the text-books that pulmonary edema may follow a thoracentesis was purely theoretical. Then, one day, a patient was admitted to the sanatorium markedly short of breath due to a pleural effusion which had displaced the mediastinal structures. About 1500 cc. of clear fluid were aspirated at once. The patient immediately felt relief. But within half an hour's time he was in a state of acute pulmonary edema, cyanotic, and expectorating an abundance of pink, frothy sputum. He recovered quickly with the aid of morphine, theophyllin, and the erect position. It is easy to visualize what happened to this man: due to the massive effusion (considerably more than the aspirated 1500 cc.) his lung was in a state of compressive atelectasis. Most of the pulmonary circulation was passing through the contralateral lung. The capillary endothelium of the compressed lung was suffering severely from anoxia. Following aspiration, the circulation to the lung was restored but the capillaries were so damaged by the anoxia that fluid leaked from them faster than it could be drained away by the lymphatics. The result was pulmonary edema. Since this experience I have felt it wise never to aspirate more than 1000 cc. of fluid at one time, allowing an interval of at least several hours between aspirations. During and following the aspiration of massive effusions it would perhaps be good prophylaxis to have the patient breathe pure oxygen through a positive pressure therapy mask.

The question of "pleural shock" is always a subject for discussion when the potential complications of thoracentesis or the administration of artificial pneumothorax are being considered. There are two types of "pleural shock," cerebral or coronary air embolism, and ordinary, everyday syncope. The latter, of course, frequently occurs with any type of minor surgical procedure and is important only in that it must always be anticipated. A cerebral or coronary air embolism is a dramatic and often fatal complication resulting from puncture of the lung and the establishment of a communication between the alveoli and a pulmonary vein. With the occurrence of cerebral air embolism the patient should immediately be placed crosswise on the bed or table with the head and trunk hanging vertically over the side. This keeps further air bubbles from entering the cephalic branches of the aorta. The subsequent treatment is largely symptomatic.

A coronary air embolism is a terrifying experience both for patient and physician. Some years ago when diagnostic lung puncture was considered a relatively safe procedure, I was investigating a lesion in the lung with an 18-gauge needle. The patient was in the sitting position. Suddenly he clapped one clenched fist over his precordium and became rigid, his blanched face contorted in agony. The perspiration stood out on his brow in large beads. His hands turned icy cold. His pulse dropped abruptly to 40 per minute, apparently because of a displacement of the pacemaker from the sino-auricular to the auriculoventricular node. After a minute of this, the pulse rate gradually dropped to 28, indicating heart block. After another minute or two the rate slowly

[9] Miller, W. S.: Tuberculosis of the Pleura, Am. Rev. Tuberc. 13: 1 (Jan.) 1926.

[10] Schuman, C.: Idiopathic Pleural Effusion, Quart. Bull. Sea View Hosp. 7: 69 (Oct.) 1941.

[11] Chisholm, D. R.: Some Points on Tuberculosis for the General Practitioner, Dis. Chest. 8: 237 (Aug.) 1942.

rose to 40 again and then to about 100. The agonizing pain abated as the pulse rate rose. The total duration of the episode was not more than about four minutes. The patient recovered without any apparent permanent damage to the heart. There is not much the physician can do in a case like this except to give morphine and amyl nitrite. He is dealing with an acute anginal attack.

In aspirating fluid from the chest a short-bevelled needle should be used. The needle should not be inserted deeper than is necessary, and it is wise to fix its depth of insertion by a hemostat clamped on the needle close to the skin. The patient should be instructed to control coughing. If the needle is felt to scrape the visceral pleura during one of the phases of respiration, it should be partly withdrawn. It is good practice never to aspirate a chest without first fluoroscoping the patient or obtaining an x-ray.

In my sanatorium experience it has not been uncommon to see referred cases of pleural effusion in which the onset of the latter coincided with the first few weeks or months of antiluetic therapy. None of these patients was suspected of having tuberculosis prior to the institution of antiluetic therapy. One patient seen a few years ago acquired syphilis while under pneumothorax treatment for tuberculosis. She secretly consulted another physician who instituted antiluetic treatment. The patient developed arsphenamine hepatitis and dermatitis and, concurrently, a massive effusion into the pneumothorax space. This rapidly progressed to a tuberculous empyema. Moore[12] emphasizes the dangers of the energetic treatment of syphilis in the presence of active pulmonary tuberculosis, citing six cases of acute miliary tuberculosis developing under such therapy. Of course, as Moore points out, it is an old observation that antiluetic therapy often causes reactivation of a co-existing tuberculous lesion. The writer's experience with pleural effusion under such circumstances has impressed him that it might not be an extreme ideal for the physician to require a chest x-ray on all patients facing antiluetic treatment. Such idealism will occasionally save a luetic from dying of tuberculosis. These remarks apply only to the treatment of syphilis with the arsenicals. Intensive penicillin treatment for syphilis apparently has no adverse effect on coexisting tuberculosis.

I have seen two cases of pleural effusion in which both sides were simultaneously involved. One of these was a known case of pulmonary tuberculosis, the other an individual whose lungs showed no lesion at the time he developed fluid. Both patients developed miliary tuberculosis and died within a few months of the onset of the effusions. The relationship between bilateral pleural effusion and miliary tuberculosis has been noted by several writers.[13] However, not all cases of bilateral effusion develop miliary tuberculosis. Nevertheless, because bilateral effusion is usually a manifestation of hematogenous dissemination, Paine[14] emphasizes the point that such cases should be watched for the development of tuberculosis not only in the lung but in other organs as well.

Pleural Effusion in Malignancy

Once considered a rare disease, primary carcinoma of the lung is now known to constitute approximately 10 per cent of all malignant tumors studied post mortem.[15] Statistics from various sources[16] indicate that the lung ranks second only to the gastro-intestinal tract as the site of primary carcinoma. Statistics also indicate that, sooner or later, pleural effusion develops in approximately 50 per cent of all cases of primary cancer of the lung. It is quite evident, therefore, that even if primary carcinoma of the lung were alone considered, malignancy would rate high in the differential diagnosis of pleural effusion in adults. When lymphosarcoma, Hodgkin's disease, and metastatic deposits are added to the list, it becomes imperative to always entertain the possibility of malignancy as the cause of a pleural effusion. Unfortunately, when a pleural effusion is discovered to be due to malignancy it is too late to do anything for the patient. Such an effusion is tantamount to a death warrant.

Uncomplicated effusions due to malignancy tend to conform to the general characteristics of transudates, that is, the fluid is relatively clear, light yellow or greenish yellow in color, contains relatively few cells, does not coagulate spontaneously, and has a specific gravity of 1.015 or lower. However, septic complications secondary to bronchial obstruction may cause the fluid to become purulent. More significant is the discovery that the fluid is hemorrhagic, for approximately one third of all malignant effusions have this characteristic.[17] The specific gravity of hemorrhagic fluids will, of course, tend to be above 1.015, and may be well over 1.030. Pure blood has a specific gravity of 1.050 to 1.060. Examina-

[12] Moore, J. E.: The Modern Treatment of Syphilis, Springfield, Ill., Charles C. Thomas, 1933.

[13] Fernandes, H. P.: Bilateral Tuberculous Pleural Effusions, Tubercle, 25: 82 (Sept.-Oct.) 1944.

[14] Paine, A. L.: Bilateral Tuberculous Pleural Effusions, Am. Rev. Tuberc. 44: 424 (Oct.) 1941.

[15] Koletsky, S.: Primary Carcinoma of the Lung, Arch. Int. Med. 62: 636 (Oct.) 1938.

[16] Jaffe, R. H.: The Primary Carcinoma of the Lung, Jr. Lab. and Clin. Med. 20: 1227 (Sept.) 1935.

[17] Simons, E. J.: Primary Carcinoma of the Lung, Chicago, The Year Book Publishers, Inc., 1937.

tion of the fluid for malignant cells by Mandelbaum's cytodiagnostic method possesses academic interest only in many cases, but when the diagnosis is in doubt this procedure, in the hands of an experienced pathologist, may definitely reveal malignancy. By a modification of the Mandelbaum technique, Goldman[18] demonstrated malignant cells in 80 per cent of 20 cases of carcinoma of the lung. By all odds, the most significant clinical characteristic of the effusion in malignancy is the rapid recurrence of the fluid each time it is aspirated. In the presence of a hemorrhagic fluid which rapidly recurs on repeated aspiration, the diagnosis is almost certainly malignancy.

It is interesting to speculate on the mechanism whereby malignant involvement of the pleura gives rise to effusion. It seems to be generally taken for granted that carcinomatous involvement "irritates" the pleura and thereby leads to effusion. This is not a very satisfying explanation in view of the fact that irritation presumes vascular reactions which are not characteristic of malignant invasion. On the other hand, if one assumes that the hemorrhagic quality of many of the effusions is due to malignant invasion of pleural blood vessels, then it is equally justifiable to postulate that the effusion itself results from the establishment by similar invasion of a direct connection between the pleural cavity and the extraordinarily rich subpleural lymphatic plexus. In other words, while the effusion of malignant pleural invasion simulates a transudate from blood capillaries, it may actually represent mechanical leakage of lymph. This hypothesis might help to explain the rapidity of recurrence of many malignant effusions following aspiration, while it provides an alternative to the difficulty of visualizing how a process of true transudation could take place through the densely thickened pleura of malignancy. It is well known, of course, that effusions occur in the absence of direct invasion of the pleura. In these cases the effusion is regarded as a true transudate resulting from diffuse, obstructive lymphatic invasion or from pressure on lymphatics and veins by hilar masses.

Pleural Effusion Due to Cardiac Failure

In his classic monograph on pulmonary edema and inflammation, Drinker[19] lucidly covers the basic facts involved in the genesis of pulmonary and pleural transudates. The following remarks are based on his presentation.

The two fundamental factors in the pathogenesis of pulmonary and pleural transudation are an increase in pulmonary capillary pressure and anoxia of the pulmonary capillary endothelium. Attention is usually focused on the former, but, while it may be the initiating factor, it is the endothelial anoxia which leads to progressive transudation by increasing capillary dilatation and permeability. Drinker points out that the capillary endothelium is unique in that it is dependent on the alveolar air, not on the arterial blood, for its oxygen supply. Another important point is that the ultimate radicles of the parenchymal lymphatics end around the alveolar ducts. There are no lymphatics within the alveolar septa. This means that fluid (lymph) transuded from the pulmonary capillaries must seep along the septa before it can enter the lymphatics. It is equally significant that this lymph, under slightly increased pressure, can transude into the alveoli as easily as it can seep along the septal planes.

Under normal conditions the balance between hydrostatic and osmotic pressure in the pulmonary capillaries is such that the rate of lymph transudation into the alveolar septa does not exceed the rate of drainage by the lymphatics. This means that the lung tissue is kept "dry," that is, nonedematous. When the capillary hydrostatic pressure is raised, as in mitral stenosis or left ventricular failure, an increased transudation of lymph occurs. As this increase approaches the point where it equals the maximum drainage capacity, the septa become edematous and lymph escapes into the alveoli. Here the vicious circle begins. The fluid in the septa, the fluid in the alveoli, and the fluid in the bronchioles all lead to local capillary anoxia as well as to anoxic anoxemia. The local anoxia in turn leads to increased capillary transudation, and so on.

Drinker has shown in animal experiments that the same factors which lead to increased parenchymal transudation also lead to pleural transudation with the formation of effusions. Since Carlisle's[20] presentation in 1943 of the treatment of 316 cases of pulmonary edema, it has become generally known that the inhalation of oxygen through an apparatus which imposes a positive pressure during expiration is very effective therapy for this condition. Respiration with positive pressure expiration, using oxygen, is effective in combating edema because it supplies oxygen to the pulmonary capillary endothelium, because it opposes the hydrostatic pressure within the capillaries, and because it forces the edema fluid to and along the lymphatic drainage channels. It is less generally appreciated that a heightened nega-

[18] Goldman, A.: Cytology of Serous Effusions, with Special Reference to Tumor Cells, Arch. Surg. 19: 1672 (Dec.) 1929.
[19] Drinker, C. K.: Pulmonary Edema and Inflammation, Cambridge, Mass., Harvard University Press, 1947.
[20] Carlisle, J. M.: Pulmonary Edema, J.A.M.A. 123: 947 (Dec. 11) 1943.

tive intrathoracic pressure leads to an increased transudation of lymph. Drinker demonstrated that if a dog breathes a mixture of 10 per cent oxygen and 90 per cent nitrogen he will develop pulmonary edema and pleural effusion when a selective resistance is imposed during inspiration. Here, again, the influence of anoxia is made evident, for if the experiment is repeated with 10 per cent carbon dioxide and 90 per cent oxygen, edema and effusion do not occur.

In 1921, Graham[21] pointed out that pleural effusions readily formed if dyspnea became marked in patients with some degree of pulmonary edema. The effusion is here attributed to heightened negative intrapleural pressure. In commenting on Graham's observations, Drinker states, "His thesis, in reality, was that, given any increase in capillary permeability, heightened negative pressure inside the chest will prove a formidable contributing factor in the production of pleural effusion and lung edema."

It should be noted that pleural effusion in heart failure may result from transudation through either the visceral or the parietal pleura, or through both. Since the visceral pleura drains into the pulmonary veins and the left side of the heart, while the parietal pleura drains into the azygos veins and the right side of the heart, it is quite evident that these two divisions of the pleura may be selectively affected by different types of heart disease. Indeed, when the visceral pleura is selectively transuding lymph, it is not difficult to visualize the parietal pleura actively absorbing the same fluid. Possibly this is the reason that in many cases of severe passive pulmonary congestion the associated effusions remain relatively small.

Pleural effusions due to congestive failure are not always generalized throughout the pleural space. They are quite commonly localized in the interlobar fissure or exist as a loculus somewhere at the parietes. This localization is easy to understand when it is realized that pleural adhesions are commonly associated with long-standing pulmonary congestion, and that acute exacerbations of congestion are often patchy and localized rather than diffuse. The localization of congestion and edema in these cases results from the anoxia associated with varying degrees of obstruction of scattered bronchi by transudation and exudation. In this connection it is pertinent to state that not all pleural effusions associated with heart disease are transudates. The chronically congested lung is often involved in exudative processes and a concomitant pleural effusion may be inflammatory in origin.

[21] Graham, E. A.: Influence of Respiratory Movements on Formation of Pleural Exudates, J.A.M.A. 76: 784 (Mar. 19) 1921.

Pulmonary infarction, so common in chronic heart disease, is often the cause of a small pleural effusion. The latter results from congestion and transudation, an area of pleura being invariably involved in infarction. The effusion of infarction is commonly hemorrhagic.

Pleural Effusion in the Nephrosis Syndrome

In glomerulonephritis manifesting the nephrosis syndrome pleural effusion results from transudation consequent on the low osmotic pressure of the blood plasma. "Renal" effusions are nearly always bilateral.

Miscellaneous Causes of Pleural Effusion

Organisms other than the tubercle bacillus may give rise to a sero-fibrinous pleurisy. Such an effusion is almost of regular occurrence in lobar pneumonia, but usually the quantity of exudate is small. The same holds for streptococcal pneumonia. If the effusion in these cases is large it nearly always becomes purulent. When a pleural effusion develops in a case of rheumatic infection, the possibility of a rheumatic pleuritis as distinct from a congestive transudate must be considered. Schwedel[22] states that "rheumatic pleuritis, next to carditis, is probably the most frequent complication of rheumatic fever." Here, too, the sero-fibrinous exudate is small in amount. Serous effusions may occasionally develop during acute infectious diseases, notably typhoid, scarlet fever, and septicemia. The exact nature of the so-called terminal effusions that accompany many of the chronic diseases has never been made too clear to me. Probably a good many of them are tuberculous in origin.

While hydrothorax associated with cirrhosis of the liver is not uncommon, hydrothorax due to cirrhosis per se is rare. An excellent review of the subject has recently been made by McKay et al.[23]

In women with pleural effusion the possibility of an ovarian tumor being the etiological factor may have to be considered. The mechanism of pleural effusion in the so-called Meig's syndrome has not yet been satisfactorily explained. A comprehensive review of the literature is presented by Nora and Davison.[24]

Other occasional causes of pleural effusion are: beriberi, acute disseminated lupus erythematosus, septic processes beneath the diaphragm, severe

[22] Schwedel, J. B.: Clinical Roentgenology of the Heart, New York, Paul B. Hoeber, Inc., 1946.

[23] McKay, D. G., Sparling, Jr., H. J., and Robbins, S. L.:Cirrhosis of the Liver with Massive Hydrothorax, Arch. Int. Med. 79: 501 (May) 1947.

[24] Nora, E. D., and Davison, R. M.: Pleurisy with Effusion Associated with Pseudomucinous Cystadenoma (Meig's Syndrome), Dis. Chest. 13: 423 (Sept.-Oct.) 1947.

anemia, obstruction of the thoracic duct, obstruction of the azygos veins, myxedema, polyserositis, coccidioidomycosis, and leukemia.

General Considerations

Excepting cases due to trauma, about 75 per cent of hemorrhagic pleural effusions are due to malignancy. The next most common cause is infarction of the lung. I have seen many tuberculous pleural effusions, but only rarely has one of them been hemorrhagic. Rubin[25] comments on the infrequency of hemorrhagic tuberculous effusions and notes how contrary the fact is to prevalent belief.

Chylothorax is a relatively rare condition. Its two most common causes are traumatic injury and malignant obstruction of the thoracic duct. The subject of chylothorax has recently been comprehensively reviewed by Jahsman.[26]

Pleural fluid should be routinely subjected to laboratory examination. The important characteristics to note are, (a) color and transparency, (b) specific gravity, (c) protein content—usually estimated by subtracting 1.007 from the specific gravity and then multiplying by 343, the result being the per cent protein, (d) clot formation, (e) white cell count and differential, (f) bacterial content.

Transudates are clear, light yellow, have a specific gravity below 1.015, a protein content of less than 2.5 per cent, are practically free of cells, do not clot, and are free of bacteria. They may be due to cardiac failure, nephrosis syndrome, or malignancy.

Exudates may be clear or cloudy, have a specific gravity above 1.018, a protein content of over 3 per cent, contain white blood cells, clot spontaneously, and may or may not show bacteria. Exudates indicate an inflammatory reaction.

A predominance of lymphocytes suggests a tuberculous etiology, a predominance of polymorphs a pyogenic etiology. Long-standing transudates may acquire a high lymphocytosis. The cytology of malignancy calls for special study.

In most cases the physician will not have to depend on the characteristics of the pleural fluid for diagnosis. However, it should be routinely examined not only for the supporting evidence obtained, but in order to provide a record for comparison if changes subsequently develop in the fluid as the result of secondary infections, hemorrhage, bronchopleural fistula, gradual transition to empyema, etc.

Whenever the cause for an effusion is not evident, the tubercle bacillus should be sought for by cultures or animal inoculation. It may be possible to demonstrate bacilli by direct Ziehl Neelsen staining of the fine coagulum which forms in the fluid.

In sending fluid to the laboratory, it is wise to be generous. About 25 cc. should be sent in a sterile, closed test tube if the tubercle bacillus is to be looked for by culture or animal inoculation. This will be concentrated before culture or inoculation. The rest of the fluid should be sent to the laboratory in a sterile container. A large amount of fluid makes it easier for the laboratory worker to measure the specific gravity and to check the coagulum directly for tubercle bacilli. A large amount of fluid is also necessary in looking for malignant cells by Goldman's modification of the Mandelbaum technique.

The differential diagnosis of pleural effusion will usually be readily solved by keeping in mind the four principal causative factors, tuberculosis, malignancy, heart failure, and renal disease. It is a simple matter to rule out or incriminate cardiac failure and renal disease. The differential diagnosis between a tuberculous and a malignant effusion is usually readily made on the basis of clinical and radiographic evidence at hand when the effusion is discovered. If no cause for the effusion is evident on clinical and radiographic examination, the effusion should be assumed to be tuberculous until proved otherwise. In such a case the fluid should be examined for tubercle bacilli. It should be remembered that the time element in differentiating between a tuberculous and a malignant effusion is of no consequence providing one assumes that the cause is tuberculous and treats the patient accordingly. By the time a malignancy causes a pleural effusion the prognosis is hopeless. If none of the "big four" seems to be the cause of a pleural effusion the less common causes should be considered one by one.

A pleural effusion is seldom a simple, self-limited entity. It is somewhat reversionary in these times to speak of pleurisy as being "idiopathic," a term which is even less definitive than the "pleurisy *a frigore*" of the older writers. As is indicated by its chief causative diseases, tuberculosis, malignancy, heart failure, and the nephrosis syndrome, a pleural effusion nearly always means serious organic disease. The chances are at least 8 to 1 that the average case will prove to be tuberculous. This in turn means that the chances are 8 to 1 that the patient *already has* active pulmonary tuberculosis. If this active pulmonary tuberculosis is not demonstrably evident, the chances that it will become so within the next four years are, conservatively, about 20 per cent.

[25] Rubin, E. H.: Diseases of the Chest, Philadelphia, W. B. Saunders Co., 1947.
[26] Jahsman, W. E.: Chylothorax, Ann. Int. Med. 21: 669 (Oct.) 1944.

Hawaii
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[EDITORIALS]

DIAMOND JUBILEE OF NURSING
1873 - 1948

The seventy-fifth anniversary of professional nursing in the United States was celebrated during the third week of November, known as Nursing Progress Week. Particular honor was paid to the memory of a remarkable and memorable woman, "Linda" (Melinda) Richards, who was America's first trained professional nurse and first superintendent of nurses, and who for nearly forty years devoted herself to the advancement of standards and training for professional nurses. She retired at the age of 70, but maintained contact with the nursing profession up to the time of her death, at the age of 89. At the age of 60 she began organizing and directing schools of nursing in hospitals for the mentally ill, a task at which she spent the last ten years of her active career.

Educational and professional standards for nursing have kept full pace with the advancement of such standards for the medical profession during this period. It is unfortunate—and probably an ironic commentary on the motives which induce women to become nurses—that the economic status of nurses has not, by and large, kept pace with their professional status. In 1946, according to the U.S. Department of Labor, the average nurse was being paid $40.25 for a 44-hour week. Many states lack uniform licensure laws to control practical nurses as well as professional ones. There is unequal distribution of nursing care, too; and many hospitals have not as yet taken proper advantage of auxiliary personnel to perform cleaning, clerical, and other non-medical tasks. The 160,000-odd members of the A.N.A.—the American Nurses' Association—are carrying on a drive to correct these conditions and to promote the recruitment of the additional 40,000 candidates needed to meet present demands.

Closer relationship between organized medicine and organized nursing would be a desirable development; and it is one that has already made considerable headway in the Territory of Hawaii. The joint occupancy and management of the Mabel L. Smyth Memorial Building by the Nurses' Associations and the medical organizations of the Territory and of Honolulu County, ten years ago, made a beginning of a closer connection between the nursing and medical organizations here. The combining two years ago, of the official publications of the two organizations into one journal, the HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN, was another important step in the same direction. Connections like these cannot but have a continuing influence for good upon the social and professional relationships of two such closely connected groups of professional workers.

The medical profession can certainly endorse, and would do well to help nurses to attain, the goals they have set for themselves in the betterment of conditions for the nursing profession. And we can say with Pearl McIver, A.N.A. president, that the nurse "is an indispensable part of American life. Her skill, courage, intelligence, loyalty, tenderness, self-sacrifice and strength of character have served the nation in peace as in war. The Diamond Jubilee will remind us that wherever man and nature assail human life, the nurse, eternal aide and colleague of the physician, is there to save it."

THE RESPONSIBILITY OF THE PRACTICING PHYSICIAN FOR DIABETES DETECTION

The discovery and treatment of diabetes mellitus at an early stage demand the attention of all practicing physicians. Failure to discover and treat diabetes early results in preventable disabilities and impairments of health. In the Diabetes Exhibit at the Annual Meeting of the American Medical Association held in Chicago in June, 1948, it was shown that the mortality rate for diabetics first seen when a complication had occurred was three times the rate for diabetics first seen earlier and before impairments had developed. Actually the future for the diabetic patient under modern medical treatment is brighter and more hopeful today than ever before.

In 1929, Dr. George H. Bigelow and Dr. Herbert Lombard began a study of chronic disease in Massachusetts which led to the publication of statistics showing that the number of diabetic patients in Massachusetts was far higher than had been heretofore thought. In 1935, a National Health Survey was conducted which confirmed these figures. In Oxford, Massachusetts, results of a survey by the United States Public Health Service indicate that at least a million undiagnosed diabetics exist in the United States and Canada.

District and state medical societies now have the opportunity to take the lead in the fight against diabetes in response to an appeal to the practicing physicians of the United States, presently being made by the Committee on Diabetes Detection of the American Diabetes Association. This committee was appointed by Dr. Charles H. Best, President, at the Annual Meeting in June 1948. Plans are being formulated for National Diabetes Week, December 6 to 12, 1948.

As a first step in a full-scale attack on diabetes, eighth among the leading causes of death, a medical society should appoint its committee on diabetes. The national Committee on Diabetes Detection stands ready to assist local committees in their work. Already the Committee is preparing material containing information on diabetes for use by the physician in his own town. These materials include programs for medical meetings, radio broadcasts and spot radio announcements for use by city and county medical societies, and suggestions for cooperation with local hospitals toward the control of diabetes.

The Committees on Post-Graduate Instruction in State and County societies should plan instruction and demonstrations in diabetes in county meetings this fall. Also, Hospital staff meetings should provide a place on their program for diabetes. Committees on Public Relations and Public Information should plan meetings for instruction of laymen, including patients, their families, and all others interested.

Women too, have an important role to play in the fight to control diabetes. It is significant that among women, diabetes is more frequent than among men. It is desirable to enlist the aid of women's organizations, especially the women's auxiliaries of the medical societies, as an adjunct to the program planned by medical societies.

Already a number of local diabetes associations affiliated with the American Diabetes Association have been formed. More such associations composed of physicians are needed. With the cooperation of the physicians within their area these associations have accepted the challenge and will strive to find and treat the million hidden diabetics. Associations will be assisted by the American Diabetes Association in attaining such objectives as: more graduate courses in diabetes for physicians; providing better laboratory services; and helping with instruction for patients. Now is the time for action—will the practicing physician seize this opportunity for progress in an all-important field or will he prefer to surrender to others his responsibility for diabetes detection and treatment?

COMMITTEE ON DIABETES DETECTION
HOWARD F. ROOT, *Chairman*

81 Bay State Road
Boston, Massachusetts

RURAL MEDICINE— A SOLVED PROBLEM?

In 1947 at the centenary celebration of the American Medical Association there were a number of charts and exhibits indicating that rural health was a problem and a challenge. Urban areas were quite well cared for in America, but rural areas did not receive good up-to-date medical service. The American Medical Association had begun to do something about it. A committee on rural health had been appointed and by February 1948 had held their third national conference on rural health.

Michigan, as a state, took the lead in this field when in September 1947 the first Michigan rural health conference was called. Rural health was defined as emphasizing everything that might promote better living conditions, better living standards and better medical service. They found an awakening of the rural people to these needs, and it was brought out that poor medical service and poor health conditions were common.

Louis Bromfield at that meeting pointed out that this whole problem went back to nutrition,

soil and economics. He said, "We are what we eat. Fertility of land and health in land is a question of balance." And he added, "Even health rests wholly on an economic basis."

It was also shown that in Michigan the more rural the area, the higher the death rate and the larger proportion of people suffering from unmet medical conditions. It was indicated that certain areas in Michigan were without hospitals or medical centers. They urged special training for doctors willing to serve in rural areas. To get doctors into rural areas it was necessary to develop rounded medical centers where the doctors could practice good medicine.

One of the speakers suggested that every physician should spend from three to five years as a general practitioner, before he is allowed to enter a specialty. It was noted that today's doctor of medicine, to keep himself abreast of medical developments, must spend a minimum of one month's time in postgraduate work . . . and keep it up year after year. They also recommended the extension of the insurance plan for rural health service rather than a compulsory tax plan.

In Colorado on May 19, there was a Rocky Mountain Regional Conference. They showed the need of equal interest in rural health on the part of the public, the physicians and the educators of the district. They also urged that good health education for everyone—especially rural health education—is every bit as essential as reading, 'riting and 'rithmetic. It should be the fourth "R" in education — long neglected and costly to the nation. It had been shown that for 1941 to 1945 the infant mortality was 38 for metropolitan areas and 47 for country areas.

It is encouraging to find that in Hawaii the rural areas show an infant mortality of 20 to 25 as compared to 32.5 in the Honolulu area. We can take pride that Hawaii, due to the plantation system, has been recognized as one of the first to bring excellent medical service to all its rural families.

N. P. Larsen, M.D.

SYNERGISM BETWEEN BACITRACIN AND PENICILLIN

Bacitracin may be the key to the treatment of that troublesome group of cases of primary syphilis which do not yield to penicillin alone. Recent work on primary syphilis in rabbits has revealed a startling synergism between bacitracin and penicillin.[1] The dose of penicillin alone which is required to cure rabbit syphilis in 50 per cent of the animals (CD_{50}) is about 40 units/kg. The CD_{50} for bacitracin is 9000 units. When used together, only 1/40 as much penicillin and 1/7 as much bacitracin were needed to produce the same percentage of cures as when they were used separately.

The varying dosage schedules of penicillin in successful use at the present time attest the fact that penicillin alone will cure a high percentage of practically all types of syphilis. But all dosage schedules have a common failing—a significant proportion of cases is not cured. Juggling the "how much" and the "for how long" has not eradicated this stubborn group of failures. Concomitant use of the old stand-by's, arsenic, bismuth and fever, in spite of their known hazards, is finding favor in some centers. Bacitracin may prove to be a surer answer; it is unquestionably safer.

C. A. Domzalski, Jr., M.D.

MEDICINE OF THE YEAR

Elsewhere in the Journal will be found an announcement of MEDICINE OF THE YEAR, an annual review of medical progress to be issued as a supplement to the Hawaii Medical Journal, appearing early in 1949. The Association has provided this feature for its members in the belief that it constitutes a valuable educational opportunity at small expense and one which will be a distinct benefit to all who subscribe. The contributors are all men of outstanding reputation in their field, distinguished as teachers and medical writers. Their names guarantee a comprehensive and critical account of the significant and important events in medicine during the preceding year, well written and of practical interest to every physician. The cost is nominal.

The arrangement by which this Annual Review is made available to members of the Hawaii Medical Journal requires that a certain proportion of the members subscribe to this service if it is to be provided. The value of the service is sufficient reason for subscribing. However, because of the short time remaining in which to ascertain the number of subscribers, it is urged that subscriptions be entered promptly in order that a sufficient number be obtained to ensure that the annual will be available to all who wish it. SUBSCRIBE NOW!

[1] Eagle, H., and Fleischman, R.: Therapeutic Activity of Bacitracin in Rabbit Syphilis, and Its Synergistic Action with Penicillin, Proc. Soc. Exper. Biol. and Med. 68: 415 (June) 1948.

PSYCHIATRIC COMMENT

The 104th annual meeting of the American Psychiatric Association in Washington, D. C., from May 17 to 21, was an excellent demonstration of the advances made in psychiatry during this past year. Over two thousand psychiatrists from all over the country and a representative group from Latin American and European countries attended the meeting.

The papers read, the round table discussions, and the various conferences covering nearly the entire field of psychiatry gave a clear indication of the prevailing trends and the numerous approaches to the fundamental problems of psychiatry. The latter was best illustrated by a great variety of papers and discussions on schizophrenia, the most important psychiatric entity. Here, I might add that one-fourth of all the hospital beds in the United States is occupied by schizophrenics. This fact alone is a clear indication of the magnitude of the problem. Every conceivable therapeutic approach to schizophrenia, ranging all the way from conventional psychoanalytical therapy to various modalities of brain surgery, is being studied and explored in various psychiatric centers throughout the country. The papers dealing with schizophrenia covered the vast field of electro-convulsive therapy, insulin therapy, and various forms of psychotherapy based on a proper understanding and evaluation of the psychodynamics of schizophrenia. Electro-convulsive therapy and insulin therapy are well established procedures and employed on a wide scale throughout the country. Several reports on prefrontal lobotomy confirmed the fact that this procedure occupies a definite place in psychiatry. Oltman and Brody of Newton, Connecticut, reporting on 117 patients, state that 60 per cent of the group of chronically ill were improved or much improved, and that 40 per cent of them could leave the hospital. They found it particularly helpful in disturbed, aggressive, and destructive patients, who constitute major problems in state hospitals. Walter Freeman of Washington, D. C., reported on transorbital lobotomy, using the transorbital approach to the frontal lobes, a method first introduced by Fiamberti in 1937. This rather simple operative procedure, according to Freeman, produces results similar to the conventional type of lobotomy with none of the personality alterations observed following the standard operation. He claims that the recovery is rapid, the morbidity minimal, and the mortality nil. The psychoanalytical approach to schizophrenia was very ably presented by John Rosen of New York and Frieda Fromm-Reichman of Baltimore. John Rosen claims to be able to establish a close relationship and transference with an advanced schizophrenic by approaching him on the level of his subconscious mechanisms and contents, and thus laying the foundation for the re-integration of the broken personality of the patient.

Attitude therapy in the treatment of psychotics and psychoneurotics was ably presented by Edward Adams of Topeka, Kansas. His paper dealt with the problems of creating a therapeutic emotional environment suited to the needs of each individual patient in a dynamically oriented hospital. Attitudes like "unsolicited love," "firm kindness," "earned consideration," and "matter of factness" will serve to illustrate the dynamic orientation of the inter-personal relationship between the patient and the staff of the hospital.

A symposium on hostility served to bring into sharper focus a problem which plays a vital part in the genesis and dynamics of psychoses and neuroses. Lauretta Bender of New York distinguishes aggressiveness in children, a positive and constructive force from hostility that a child develops as a reaction to frustration in the fields of normal maturation and inner fantasy life. Clyde Kluckhon, an anthropologist, of Cambridge, Massachusetts, very ably discussed the "free- floating aggression" present in every known human society. This aggression is drained off at crucial times by wars. Most of it, however, is channeled into socially creative endeavors like arts, science, exploration, public works and the like. A great part of this energy is diffused into various streams, like the small angry outbursts of daily living, into bias and prejudice directed against segmental minorities within the society, but also into numerous constructive efforts.

The age-old concept of psychopathic personality was the subject of a round table discussion. Some new interpretations, particularly the one of a psychoneurotic reaction-pattern involving the entire personality, were presented as against the old, time-honored concept of a constitutional in-

feriority, found so unsatisfactory to most psychiatrists. This new concept stresses the presence of psychoneurotic features of the infantile variety in the psychopath, most of them derived from a basic hostility of the patient in response to environmental influences, with full sway of the egocentric tendencies and little or no consideration for the superego forces, the social and the moral standards.

John Bowers of Washington, D. C., in a paper on atomic energy, discussed the psychological implications of an atomic explosion. Bowers was one of the first American officers to enter Hiroshima after the explosion and was deeply impressed by the apathy and reactive depression which gripped nearly the entire population. He saw no evidence of panic or excitement. The people were depressed, deeply preoccupied, gripped by fear of impending death. This important observation should be kept in mind in this era of atomic energy.

A round table discussion was devoted to the challenging theme of Faith and Psychopathology. Psychiatrists and leaders in religion took part in this symposium, making a genuine effort to establish a relationship between religious experiences and psychological reactions. Although both groups were frequently discussing the same fundamental phenomena of the human mind, the listener was often amazed at the striking differences in the interpretation and the terminology used. It is the terminology, the semantics, that will have to be clarified before a fruitful outcome from such a symposium could be expected.

Papers on a great variety of other subjects, too numerous to mention, helped to make the convention an outstanding event.

William C. Menninger, Topeka, Kansas, president, will be succeeded in 1949 by George S. Stevenson, New York, president-elect.

MARCUS GUENSBERG, M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 275th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on August 12, 1948. The meeting was called to order at 8:15 p.m. by the Vice President, Dr. H. Sexton. Those present were: Drs. W. N. Bergin, Leo Bernstein, S. R. Brown, M. H. Chang, H. E. Crawford, D. S. Depp, S. Kasamoto, W. F. Leslie, W. Loo, A. Orenstein, T. T. Oto, C. L. Phillips, H. M. Sexton, L. L. Sexton, and T. D. Woo.

A letter was read informing the Society that the Public Relations Committee of the Hawaii Territorial Medical Association engaged the services of Edward F. Stegen and Associates, public relations counsel, during the period July 20 to September 10, 1948.

The application of Dr. John Jenkin for membership in the Society, approved by the Board of Censors, was presented. Dr. John Jenkin was unanimously elected by secret ballot.

By secret ballot the new Constitution and By-Laws of the Hawaii County Medical Society were unanimously adopted.

Dr. A. Orenstein, Chairman of the Disaster Council, discussed a report distributed to the membership on the administration of the disaster program.

Dr. H. E. Crawford presented a report on the meeting of the Councillors of the Hawaii Territorial Medical Association. He suggested that the Society express approval of the HMSA "C" Schedule as a temporary measure until the Territorial fee-schedule is approved. On motion of Dr. T. Oto, seconded by Dr. D. Depp, this measure was unanimously approved by the President of the Hawaii Territorial Medical Association of this action.

A report of the Public Policy and Grievance Committee was presented and action was taken on each of four recommendations. The Society unanimously approved the Committee's first three recommendations regarding the administration of child health conferences, the role of the physicians and public health nurses in child health supervision and the re-opening of child health conferences at the Naval Air Station Housing Project. The fourth recommendation of the Committee was voted upon as two measures. It was unanimously agreed that the recommended fee schedule for major procedures for private patients, based upon the new fee schedule with the unit value varied according to income and based upon the income of a single person, be adopted. The Society unanimously approved the adoption of the recommended fixed fee schedule for routine procedures for private patients, subject to change as indicated by the Society. It was the consensus that the consultant's fee be the responsibility of the physician requesting the consultation. It was agreed that all publicity regarding the Public Policy and Grievance Committee and the Fee Schedule for private patients be approved by the Society before release.

The scientific program consisted of a talk and demonstration with lantern slides of "Precancerous and Cancerous Lesions of The Skin" by Dr. Harold Johnson of Honolulu.

* * *

The 276th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on September 23, 1948. The meeting was called to order at 7:40 p.m. by the President, Dr. Leabert Fernandez. Those present were: Drs. Leo Bernstein, M. H. Chang, L. R. Fernandez, R. S. Fillmore, S. M. Haraguchi, V. Jim, W. F. Leslie, R. M. Miyamoto, A. Orenstein, T. Oto, C. L. Phillips, H. M. Sexton, L. L. Sexton, W. J. Seymour, G. Tomoguchi, F. Wong, and H. B. Yuen.

A communication from Dr. G. A. Batten was read requesting the appointment of a representative of the Medical Society on the Hawaii Cancer Society. Dr. R. Miyamoto was appointed to this position.

The application of Dr. Richard A. Yamanoha for membership in the Society, approved by the Board of Censors, was presented. By secret ballot, Dr. Yamanoha was unanimously elected into membership in the Hawaii County Medical Society.

The report of the Public Policy and Grievance Committee was read. Dr. H. Sexton indicated that this Committee recommends that the status quo regarding the care of indigents be maintained until outpatient services with interns are developed at the Hilo Memorial Hospital and/or other hospitals in the County and that county dentists be appointed to provide dental care for indigent patients. This report was based upon a letter from Dr. Joseph Palma, President, Hawaii Territorial Medical Association, requesting the opinion of the Society on medical care policies of the Department of Public Welfare. It was moved by Dr. C. Phillips, seconded by Dr. H. Yuen, that the report be accepted. Carried unanimously.

The scientific program consisted of a talk on "Typhoid Fever and the Treatment of a Case with Streptomycin" by Dr. T. Oto.

* * *

At the regular meeting of the Hawaii County Medical Society held October 14, the membership present unanimously approved, in principle, the contractual fee schedule with the changes recommended by the Honolulu Board of Governors provided that it does not jeopardize HMSA. In addition, the following comments were made:

1. The unit value for insurance examinations should be 10.0 instead of 7.5;
2. The surgery schedule for ptherygium is too high —the unit value should be about 35.0 instead of 60.0;
3. The unit value of tonsillectomy is too high;
4. What is included in a normal delivery should be clarified. Is prenatal care and 6 or 8 weeks of postpartum care, etc. included?

LEO BERNSTEIN, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting of the Honolulu County Medical Society was held on October 1 in the Mabel Smyth Building at 7:30 p.m. Dr. Gotshalk presided. There were 43 members and guests present.

The chairman announced that the Board of Governors is now circulating to all members of the Society a bulletin reporting the actions taken at each of its meetings. Any member of the Society is privileged to attend the Board of Governors meetings or to bring up for discussion at the County Society meetings any action of the Board of Governors.

Dr. Gotshalk stated that a letter had been received from Bauer Portraits, 312 Lewers Road in Waikiki, offering to photograph each member of the Medical Society without any obligation. The Medical Society would be furnished with one print of each doctor and the doctor would be presented with a mounted portrait. On recommendation of the Board of Governors, the Society voted to accept this offer.

Dr. Kyuro Okazaki presented a paper entitled "Liver Function Tests." This was discussed by Dr. Eric Fennel. Dr. Michele Gerundo read a paper entitled "Plasmogeny: On the Origin of Life."

At the close of the scientific session, refreshments were served on the lanai.

* * *

A special meeting of the Honolulu County Medical Society was held in the Mabel Smyth Auditorium Friday, October 29, 1948, to consider the proposed Territorial Fee Schedule. Dr. Gotshalk presided; there were 94 present.

The following resolution was introduced by Dr. Fred Irwin and seconded by Dr. G. A. Batten:

> "Whereas, it seems to be advisable, almost imperative, to support the prepayment medical plan under the control of the doctors, and
>
> Whereas, certain lay elements both in Hawaii and in a great many states are trying to wrest control away from the doctors, and
>
> Whereas, the prepayment plan known as the Hawaii Medical Service Plan is now a going concern owned and operated with the consent and approval of the doctors of this Society, and
>
> Whereas, the Hawaii Medical Service Association cannot operate successfully without some concession in the regular fee schedule,
>
> Now therefore be it resolved, that the Honolulu County Medical Society now in session allow and instruct the Hawaii Medical Service Association to proceed under the present fee schedule known as the 'C' bracket, plus 10 per cent additional."

Resolution temporarily tabled on motion of Dr. Arnold, Jr., seconded by Dr. Hill.

The Territorial fee schedule, as it appeared in galley proof, was rejected on motion of Dr. Hill, seconded by Dr. Burlingame and passed by a vote of 45 to 4.

Dr. Doolittle and others expressed appreciation for the amount of work done on the fee schedule.

Dr. Dickson moved, seconded by Dr. Herter, that any new fees schedule should be on a *county* level. This motion passed without a dissenting vote.

Dr. Palma approved of Dr. Irwin's proposal to use the "C" schedule plus 10 per cent for H.M.S.A. He further proposed an additional new increase of 15 per cent in the Workmen's Compensation fee schedule to approximate that of the H.M.S.A.

On motion of Dr. Arnold, Jr., seconded by Dr. Hill, Dr. Irwin's resolution was again brought up for consideration.

Dr. Doolittle offered the following amendment to Dr. Irwin's resolution: that the "C" schedule plus 10 per cent be effective for H.M.S.A. only until such time as a standard fee schedule to cover all agencies is presented and approved by the Society. This amendment was seconded and passed.

Dr. Irwin's resolution was passed.

Dr. Majoska moved that the Legislative Committee make every effort to have section 4425 of the Revised Laws of Hawaii 1945 changed so that any patient coming within the province of the Workmen's Compensation law may choose his own physician. The motion was seconded and passed.

On motion of Dr. Arnold, Jr., seconded by Dr. Durant, the chairman was authorized to instruct the Legislative Committee to secure legal advice to prepare legislation providing free choice of physician for workmen's compensation patients.

SAMUEL L. YEE, M.D.
Secretary

* * *

KAUAI COUNTY MEDICAL SOCIETY

The monthly meeting of the Kauai County Medical Society was held at the Lihue Hotel in Lihue, Kauai, T. H. on September 22, 1948. Members present were: Drs. Bickell, Brennecke, Cockett, Fujii, Goodhue, Ishii, Kuhns, Mason, Masunaga, Wade and Wallis. Guests present were: Mr. O. B. Patterson and A. H. Achor of the Hawaii Medical Service Association, Senator J. B. Fernandes, incumbent Democratic Senator from Kauai, Mr. Manuel Aguiar, Kauai's Democratic Candidate for Senator, and Mr. W. Leong, Democratic Party member. Mr. Barlow Hardy of the *Garden Island News* was present as reporter.

President Cockett called the meeting to order at 8:05 p.m. and presented the three Democratic Speakers, who covered their National, Territorial and Local party platforms. Nothing was mentioned however, concerning their stand, or the stand of their party on socialized medicine or any of its aspects. Senator J. B. Fernandes in concluding assured the members of his willingness to aid in medical matters during the next legislative session.

It was moved, seconded and unanimously carried that the position of nutritionist on Kauai be maintained and more firmly established by incorporating it into the framework of official Territorial agencies as a duly appointed Territorial position. The Kauai County Medical Society therefore goes on record herewith:

(a) as appreciating the foresight of the Kauai Tuberculosis Association in initiating and fostering the nutrition on Kauai by creating the position of nutritionist as a temporary test demonstration and

(b) as favoring the establishment by proper legislative authorities, of an official Territorial position for a nutritionist on Kauai.

Mr. O. B. Patterson, Executive Director of the Hawaii Medical Service Association explained and discussed the new medical service plan and its simplifications.

* * *

The regular meeting of the Kauai County Medical Society was held at the Kauai Inn, in Lihue, Kauai, T. H., on October 13, 1948. Members present were: Drs. Bickell, Boyden, Chisholm, Cockett, Fujii, Goodhue, Ishii, Kuhns, Mason, Wade and Wallis. Guests present were: Dr. Quisenberry, Chief of the Bureau of Venereal Diseases of the Territorial Board of Health, Mr. Howard West, Secretary of the Republican Party on Kauai, and Mr. Clem Gomes, Republican candidate for re-election as Territorial Senator. Mr. Michael Fern of the *Garden Island News* was present as reporter.

President Cockett called the meeting to order at 7:45 p.m. and presented the speakers. Mr. Howard West covered the National and Territorial platforms of his party. Following this, Mr. Gomes discussed Socialized Medical Care, Compulsory Health Insurance and its disadvantages. Mr. Gomes went on record in his stand against socialized medicine, emphatically stating, "that if elected, he would fight against the socialization of medical practices."

The question of Dr. Harl's membership was discussed. It was moved, seconded and carried that Dr. Harl be an Honorary member. This Honorary membership is to be retroactive to the time he last paid his dues. The Treasurer informed the members that Dr. Harl last paid his dues in full as an active member in 1946.

Dr. Wilbar's letter concerning his appreciation to the members of the Kauai County Medical Society in recommending the permanent establishment of a nutritionist as an official Territorial position on Kauai was read.

Dr. J. M. Kuhns was appointed as Chairman of the Fee Schedule Committee for the Island of Kauai.

Dr. Quisenberry of the Bureau of Venereal Diseases of the Territorial Board of Health discussed the incidence of venereal disease on Kauai. Dr. Quisenberry then explained and discussed the Hawaii Cancer Society program. He mentioned that all monies collected in the Territory will be used in the Territory. The Island of Kauai will receive an allocation of funds to be expended on a Cancer Educational Program. Suggestions as to the best means to use this fund were discussed. No action was taken however.

Drs. Bickell and Ishii were appointed by President Cockett as Co-chairmen of the Kauai Cancer Committee of the Kauai County Medical Society. The Co-chairmen were requested to crystallize an adequate and satisfactory program for the expenditure of Kauai's fund.

It was moved, seconded and carried that the Secretary write a letter to the Kauai Sugar Planters' Association concerning information and translation of Venereal Disease data to the Filipino employees on plantations.

* * *

A special meeting of the Kauai County Medical Society was held on October 21, 1948 at the Wilcox Memorial Hospital in Lihue, Kauai, T. H., to discuss the proposed Territorial Fee Schedule. Members present were: Drs. Boyden, Cockett, Fujii, Goodhue, Ishii, Mason, Masunaga and Wallis.

President Cockett called the meeting to order at 7:30 p.m. The new fee schedule was discussed and commented upon. Following lengthy discussions, the members agreed on the new fee schedule providing the new fees will not embarrass the finances of the Hawaii Medical Service Association. It was unanimously agreed that a comparison should be accurately determined by comparing the costs of this new schedule against the costs for medical services to the Hawaii Medical Service Association for the year of 1947.

W. W. Goodhue, M.D.
Secretary

* * *

MAUI COUNTY MEDICAL SOCIETY

The September meeting of the Maui County Medical Society was held at the Maui Grand Hotel on September 21, 1948. Following dinner, the meeting was called to order at 7:40 p.m. by the President, Dr. Kanda. The following members were present: Drs. Beland, Burden, Cole, Fleming, Haywood, Kanda, Kashiwa, H. Kushi, McArthur, Patterson, Rockett, Sanders, Shimokawa, Tompkins, Toney, Underwood and Wong. Guests were: Drs. Quisenberry and Ferkany.

1. Treasurer's Report: Present bank balance $1,362.77. Outstanding debts—$728.00 owed to Territorial Association for special assessment.

2. Report of Committees:

a. Disaster Committee: Dr. McArthur stated that there had been no formal meeting of the committee. He discussed several ideas which he had in mind but which were not yet in proper shape for submission to either the Committee or the Society. These involved aid stations, dispersal points, etc.

b. County Fair Committee: Dr. Fleming is making up a roster of all members of the Society with the time they will each be available for emergency work at the Fair grounds.

c. Public Relations: In the absence of the Chairman, Dr. St. Sure, no report was submitted.

d. Program Committee: Dr. Patterson reported that every effort had been made to bring Mainland doctors to Maui during the Pan-Pacific Surgical Congress for a scientific meeting. No cooperation was received from Honolulu so in the future the program committee will contact available doctors directly to assure their attendance at future scientific meetings.

e. Cancer Committee: Dr. Cole reported that about $6000.00 had been collected on Maui but that no definite way had been decided upon to spend this money. Dr. Patterson suggested that some of this money might be made available to obtain the services of a pathologist for the Island. Dr. Quisenberry stated that the Cancer Committee was making plans for the use of the money. The plan includes the obtaining of recognized cancer specialists who will be sent to the various Islands to give lectures to the medical profession.

3. Report of Councillor: Dr. Sanders reported that a Procurement and Assignment Committee had been set up by the Territorial Association for the procurement of medical officers in case of a National Emergency. It would be the duty of this committee to submit names of doctors who would be available for induction in case the medical profession was called upon to supply medical men and at the same time give the civilian population proper medical coverage. Each County Society is to elect a similar committee. The following doctors were elected to the Maui County Committee: Drs. Burden (Chairman), McArthur, Tompkins, Cole and Underwood.

Correspondence:

1. A letter from the Territorial Association was read requesting that the County Society submit the name of

their outstanding general practitioner if they wished. This name would be considered in picking out the name of a doctor to be submitted to the National Association for the choice of the outstanding general practitioner in the Country.

2. Letter from Dr. Batten requesting name of Maui doctor to be County Medical Society representative on the Territorial Cancer Committee. Dr. Cole was named as Maui representative.

3. Letter from HMSA stating that members of the Pineapple Plan can only go to outside doctors for fractures, operations and delivery and have their bills paid by HMSA.

4. Letter from the HMSA signed by Dr. Irwin requesting that the HMSA not be included in the new fee schedule covering contractual relationships. If the HMSA has to pay under the new fee schedule they will have to go out of business or raise their rates to such an extent as to make the plan inoperable. The secretary was instructed to write to Dr. Palma asking for a clarification of the letter.

* * *

The Maui County Medical Society held a special meeting October 26 to discuss the new Contractual Fee Schedule of the Hawaii Territorial Medical Association. The following suggestions for changes in the galley proof were approved unanimously by the society.

1) The Maui County Medical Society is in agreement with the first six changes in the schedule as proposed by the Board of Governors of the Honolulu County Medical Society.

2) We object to the seventh change feeling that it has no place in the fee schedule but that we approve the 20% withholding (Physicians' reserve) which should be in a separate agreement with Hawaii Medical Service Association.

3) Life Insurance examinations should have a minimum charge of $10.00. Inasmuch as the insurance companies take risks of up to $2000 without any examinations it is felt that the value of the doctors' examination in policies above this figure is worth at least $10.00 to the companies in decreasing their risk for these larger amounts.

4) Veterans Administration Form 2545 which is eight pages long should carry a minimum charge of $10.00.

This society would like to have several other items clarified for their information.

a) Under Deliveries there is an entry "Normal—including episiotomy and forceps—$150.00." Are we to interpret this as meaning that a multipara who delivers a baby without the need for episiotomy and forceps is also to be charged $150.00? There is no listing for a normal spontaneous delivery.

b) Under Abdominal Surgery the Unit Value for an esophagoscopy is $50.00. Under Ear, Nose & Throat an esophagoscopy is listed at $100.00. Since in either case the examination is done, or should be done, by a specialist we feel that the charge should be the same in both cases.

EDWARD B. UNDERWOOD, M.D.
Secretary

BOOK REVIEWS

Insects of Hawaii. Volumes 1-3. By Elwood C. Zimmerman. 206 pp. Price $3.50. University of Hawaii Press, Honolulu, 1948.

It requires a lot of nerve, or some substitute for it, for a physician to review a technical treatise on entomology. I agreed to do it, not that I thought I was better qualified in the subject than any other physician, but because I enjoyed reading Volume I so much that I felt it was likely that many other physicians would enjoy it equally. Skipping, of course, must be done judiciously, because the sections on the technical botanical aspects of the flora of Hawaii and the technical aspects of the insects of Hawaii are no places for any physician to intrude. The balance of the first volume, which is devoted in the broadest way to the natural history of these Islands, was to me of absorbing interest. Even the least reflective individual must have, from time to time, wondered how plants and animals arrived in these Islands in the first place. Here in this book for the first time do I find a sensible, rational, unopinionated discussion of this subject which appears to me to be the best I have ever seen. Even for a person with no interest whatever in entomology the book reads as pleasantly as most novels.

I am confident that the technical aspects of the remaining volumes, which will be beyond my ken, will be potentially of the greatest usefulness to those persons who need accurate and detailed knowledge of the types of insects found here and are required from time to time to identify them. The book belongs in the library of every scientific organization.

Volume 2 has among much purely non-medical material an exhaustive description with drawings of all the lice known in Hawaii, and a discussion of them as vectors of disease and of repressive measures against them. Volume 3 has a similar article on the rubrofasciate triatoma or kissing bug.

It becomes apparent that this series of books will always be most useful in the study of any problem in which insects are an important factor. This means, of course, that every reference library in Hawaii needs them since insects are likely to be a factor in almost any sort of problem.

H. L. ARNOLD, M.D.

Twentieth Century Speech and Voice Correction. Edited by Emil Froeschels, M.D. 321 pp. Price $6.00. The Philosophical Library, Inc., New York, 1948.

This book reviews the pioneering efforts of many workers in a very controversial field. The lack of an accepted and well organized body of fact and opinion in the field of speech pathology and treatment makes a symposium such as is recorded in this volume a peculiarly appropriate method of surveying the field. Recent trends are covered in different areas by different and often disagreeing authorities. The reader, however, should be acquainted with these divergent opinions and approaches incidental to the new developments in this field. As yet there has been very little crystallization of the generally accepted fact and opinion. The quality of each chapter's contribution varies and would have to be discussed individually.

While this entire book suffers from a lack of systematization and organization, this is but a reflection of the condition of the entire field of speech and voice correction today. Hence, the rather complete coverage of nearly every controversial aspect of the pathology and treatment of speech disorders in this symposium volume performs a valuable service and gives the psychologist, neurologist, psychiatrist and speech therapist a valuable source book for the latest developments in this field.

JOHN G. LYNN IV, M.D.

Practice of Allergy. By Warren T. Vaughan, M.D. Second Edition. Revised by J. Harvey Black, M.D. 1092 pp. with 310 illustrations. Price $15.00. The C. V. Mosby Company, St. Louis, 1948.

An excellent, well edited, second edition of an already comprehensive and very popular book on Allergy. Dr. Vaughan's original volume, written in characteristically clear, concise style with meticulous care to the minutiae of detail of the subject, and so reminiscent of his illustrious father's writings, has been one of the volumes of choice with teachers of the subject of allergy. Dr. J. Harvey Black has maintained the quality and flavor of Dr. Vaughan's original book which made it so popular with the profession. Several sections, although revised in keeping wtih newer ideas of theory and therapy, have nevertheless retained Dr. Vaughan's opinions where advances have shown these to be still acceptable. Several chapters have been completely recast, including "Fungus Infections With Associated Allergy" and "Determination of Vital Capacity." These revisions, representing the latest concepts of the subjects, have added greatly to the value of the book for the specialist as well as the general practitioner. This book is one which should be used as a ready reference by all physicians who manage allergic patients.

TELL NELSON, M.D.

Principles Governing Eye Operating Room Procedures. By Emma I. Clevenger, R.N. 215 pp. with illustrations. Price $5.50. The C. V. Mosby Company, St. Louis, 1948.

"At last the ophthalmic surgeon and his nurses who are intrusted with the care of his instruments have an authoritative book arranged for ready reference." So writes Dr. Conrad Berens in the foreword of this timely treatise which fills a long felt need in the ophthalmic operating room of any general hospital.

The systematic and thorough discussion of surgical instruments, electrical and sundry equipment, hypodermic needles and syringes, sutures, dressings, drugs, linens, gloves, supply and instrument tables, employed during practically all types of eye operations, leaves little to the imagination, and provides the nurse in charge with a dependable guide in both routine and emergency procedures. The numerous photographs are clearly labeled and are easy to interpret. It is hoped that they will be of aid in solving the mystery that heretofore seemingly shrouded the armamentarium of the ophthalmologist.

The few omissions are undoubtedly due to the author's desire to accurately reproduce the requirements

of the attending surgeons at the New York Eye and Ear Infirmary. For a community like ours, where ophthalmological thinking represents teachings from many parts of the country, it would have been more expedient to include a wider variety of instruments for the various types of operations. For example, under the classical cataract extraction it would seem desirable to include an anterior chamber irrigator; under dacryocystorhinostomy, the use of a flexible narrow "brain" retractor; for diathermy for detached retina, a trephine; etc.

WILLIAM JOHN HOLMES, M.D.

Zinsser's Textbook of Bacteriology. Revised by David T. Smith, M.D. and Donald S. Martin, M.D., M.P.H. Ninth Edition. 992 pp. Price $10.00. Appleton-Century-Crofts, Inc., New York, 1948.

The volume is the ninth revised edition of the long recognized standard textbook of bacteriology by Hiss and Zinsser, the eighth edition having been revised by Stanhope Bayne-Jones.

The format of this book and the numerous photomicrographs and illustrations through the use of well-organized tables, are excellent.

The volume is naturally written primarily from the point of view of the medical student. The public health aspects are brought to the student's attention by an introductory statement as each disease is considered.

A significant feature of the volume is the frequent reference to very recent articles in the literature, many of the references listed at the end of each chapter being concerned with papers published during the years 1947 and 1948.

The rapid developments which were made, during and since World War II, in the fields of antibiotics, bacteriology of the enteric diseases (particularly salmonellosis and shigellosis) and the bacteriology of fungus infections are especially well presented.

The section on technical methods is adequate but the student should naturally supplement this by reference to texts that are designed exclusively to this phase of microbiology.

The textbook is a valuable contribution to the field of bacteriology.

MAX LEVINE, Ph.D.

Medical Writing. By Morris Fishbein, M.D., with the assistance of Jewel F. Whelan. Second edition. Price $4.00. 292 pp. The Blakiston Company, Philadelphia and Toronto, 1948.

This handsome and somewhat expanded version of Dr. Fishbein's valuable treatise on medical writing should be read with care by every budding medical writer, and might be read with profit by a few of those who have passed the budding stage. It is full of useful information about how to write an acceptable medical paper, by a man who has accepted and rejected more medical manuscripts than almost any other editor living. He knows what is good about good papers and he knows what is bad about bad ones, and he knows how to tell the reader these things.

Medical writers who aren't serious about their work but want to indulge in it occasionally anyway should use the book as a handbook to help them make their occasional efforts as editorially acceptable as possible, or at least have it available for their secretaries to accomplish this.

It's worth owning, if you write no more than a paper every year or two.

HARRY L. ARNOLD, JR., M.D.

Textbook of Pharmacology and Therapeutics. By Harold N. Wright, M.S., Ph.D., and Mildred Montag, R.N., M.S., Fourth Edition, illustrated. 720 pp. Price $4.00. W. B. Saunders Company, Philadelphia and London, 1948.

This is the first completely post war text on pharmacology to come to the attention of this reviewer, and as such will be welcomed by both student and teacher of this subject. Physiology, though a scientific discipline, is so fluid in its development that the passage of but a few months brings important new developments which no teacher can overlook, but with which no publisher can afford to keep pace. For example, procaine penicillin is a dosage form which has taken over about 80 per cent of our use of this essential antibiotic, yet which, in both its oil and aqueous suspensions, has come on the scene too recently to be included in this text—just five months off the press. This difficulty in keeping abreast of a rapidly growing science makes one conjecture how long it will be before some publisher brings out a text in loose leaf form which could, with a minimum expense, be kept as current as your latest notification of price increases.

Gratifying recognition is given to the great advances made in some particular fields of chemotherapy, notably in the use of the antibiotics, penicillin, streptomycin, tyrothricin, bacitracin, and others; a new evaluation of the sulfonamides since the introduction of the antibiotics; the increasing importance of knowing causative organisms involved in chemotherapy; the development of numerous antihistaminic compounds resulting from an increased understanding of drug competition in essential enzyme systems—a mechanism which explains, also, the action of dimercaprol (BAL) in heavy metal poisoning, and the chemotherapeutic action of both the sulfonamides and the antibiotics. Kudos is given also to the new synthetic substitutes for morphine; the use of curare as a relaxant in anesthesia as well as in spastic states; the beginnings of chemotherapy in neoplastic disease, and the brighter outlook in the chemotherapy of leprosy. In this last connection we note a gross error in the incidence of leprosy, quoted as 4000 for Hawaii and 16,000 for the Philippine Islands. July statistics from the Board of Hospitals and Settlement give the present figure at 400 cases, which figure includes 180 "paroled" or bacteriologically negative cases. It is doubtful if the figure for Hawaii ever reached half of the asserted number, even when case finding was notoriously inadequate and the settlement at Kalawao "held" (if it did not house) between ten and eleven hundred patients.

The only other exceptions this reviewer takes are both matters of omission, and it would be hard to please every one in this respect; however, it seems strange that BAL (dimercaprol) was considered important enough to receive special mention in the foreword as a discovery of significance, yet in the body of the text it receives only one line in connection with the use of arsenicals in the treatment of syphilis, and no mention at all in the chapter on toxicology, though they deal specifically with poisoning due to heavy metals. The other inclusion I would have suggested is the nitrofurans, which are looming larger on our horizon in the treatment of surface infections, having replaced to a considerable degree both the sulfa and penicillin ointments for this purpose.

The format of the book is good; the type readable, grade of paper excellent, and illustrations modern and adequate. Two or three of the reproductions of dermatological conditions would have been much more telling in colored than in black and white photography, but this is a minor defect.

I feel that this is one of the best approaches yet made to the subject of pharmacology for the student nurse and the graduate who hopes to keep pace with the developments in her profession.

SR. WALTER DAMIEN, R.N.

Case Studies in the Psychopathology of Crime. By Ben Karpman, M.D. Volume 3, 834 pp.; Volume 4, 875 pp. Price, not given. Medical Science Press, Washington, D. C., 1948.

These volumes are a continuation of the same sort of painstaking, detailed psychiatric case studies of various sorts of criminals that were found in the first two volumes. There is also a defense, by the author, against numerous criticisms of his approach and method. The book should certainly be of interest to psychiatrists, and perhaps of even greater interest to criminologists and penologists.

HARRY L. ARNOLD, JR., M.D.

Treatment of Heart Disease. By William A. Brams, M.S., M.D., Ph.D. 195 pp. Price $3.50. W. B. Saunders Company, Philadelphia and London, 1948.

In this book the author offers a definite, concise program for the management of heart disease and its complications. The therapeutic pattern used follows accepted and tried procedures without going into any discussion or evaluation of other forms of therapy. This didactic treatment of the subject makes it excellent for quick reference. The chapter on the pharmacological action of drugs is particularly good. References are well chosen.

H. C. GOTSHALK, M.D.

Standards for the Diagnosis and Treatment of Cancer. By The Cancer Committee of the Iowa State Medical Society. 160 pp. Price $1.00. Athens Press, Iowa City, Iowa, 1948.

This book is a "Cancer Manual" for practicing physicians. It is the second edition of a similar compendium which was published in 1937 for the physicians of Iowa. It proved to be so popular at that time that it was distributed to the doctors of several states. In this new edition, the developments of the past eleven years in cancer diagnosis and treatment are presented.

The basic elements in cancer control are presented very well. A three point cancer program centered around the family physician is outlined. This consists of (1) lay education in the early symptoms and signs of cancer, (2) improved undergraduate and postgraduate professional education in standard methods of diagnosis and treatment of cancer, (3) provision of adequate diagnostic and treatment facilities for all persons who have or are suspected of having cancer.

Brief mention is made of the extent of the cancer problem and all statistics are presented in a painless manner. The parts which may be played by the three agencies concerned, namely: the lay cancer society, the medical society, and the health department, in solving the cancer problem, are indicated in passing.

The busy practicing physician should receive considerable assistance from this manual. It presents most of the latest developments in the diagnosis and treatment of cancer by specific location in the body including in a limited way such new diagnostic aids as the cytologic technique as developed by Papanicolaou and his coworkers. It would require many hours of diligent reading to glean the material presented here from text books and medical literature.

WALTER B. QUISENBERRY, M.D.

Preoperative and Postoperative Care of Surgical Patients. By Hugh C. Ilgenfritz, A.B., M.D., F.A.C.S. 898 pp. Price $10.00. The C. V. Mosby Company, St. Louis, 1948.

The magnitude of Dr. Ilgenfritz' book first of all emphasizes a fact that should be well appreciated by every surgeon, namely, that the technical aspect of surgical treatment actually comprises but a small portion of the total service rendered the patient. Further, in evaluating the broad aspects of management for any surgical problem, it may be considerably more important for the surgeon to apply the principles of corrective dietary therapy, decompression of an obstructive colon, or relief of pain and anxiety, than to have used skin towels or to have aseptically anastomosed the intestine during an operation.

In my opinion this book is the finest treatise covering surgical care to date. It is comprehensive and complete, and certainly the most recent. The author has embodied several experimental physiological principles which were first described less than one and one-half years ago. The chapters on fluid and electrolyte balance, nutrition, metabolism and chemotherapy are outstanding. Complete physiological and biochemical principles are provided to clarify and support the sound practical suggestions in treatment offered.

The material in this book is basic and anyone assuming the responsibility of rendering adequate surgical treatment should have working knowledge of all the information within its covers. I unreservedly recommend it.

V. C. WAITE, M.D.

Sexual Behavior in the Human Male. By Alfred C. Kinsey, Wardell B. Pomeroy, and Clyde E. Martin. 804 pp., 173 charts, 159 tables. Price $6.50. W. B. Saunders Co., Philadelphia & London, 1948.

This book is an exhaustive, or nearly so, analysis of the replies made by a few thousand men to a questionnaire designed to investigate their sexual behavior. It is not of any special value to the practicing physician. A poem published not long ago in *Time* commented upon The Report most trenchantly; it ended, as I recall,

"Did Man, who wrote the Song of Songs, write that?
Oh, God! Oh, Kinsey! Oh, Jehoshaphat!"

HARRY L. ARNOLD, JR., M.D.

REMINISCENCES OF DECEMBER SEVENTH: VII

On March 24, 1943, I talked to Dr. William H. Wynn. Dr. Wynn stated that he was making rounds early on the morning of December 7, 1941, and had been told at Kapiolani Hospital that the city was under attack, but like many discounted it. He went to St. Francis and then to Children's Hospital, and while he was there three badly wounded children were brought into the hospital. He then proceeded to Queen's Hospital, where he was told on the steps of Queen's Hospital, by someone that had talked to Dr. Hodgins, about the attack at Pearl Harbor. He proceeded to his office and awaited call to a point of need. However, no call came, and about 1:00 o'clock he gathered together the assistants at his office, namely Mrs. Hazel Matson, Mrs. Peggy Haglund, Miss Truslow and a male nurse, Jerry Owens, who had formerly been a medical corps man in the Army. With these four people he drove to Tripler General Hospital, where he reported for duty.

He was assigned to surgery and worked in the major surgery until 11:00 p. m., at which time they had just about cleared out all the major cases. So far as he knows, the minor work was done on the wards. He stated that they had to borrow scissors back and forth from one table to another; that there was an inadequate and improper type of suture material; that about all the suture material they had was No. 2 chromic catgut. He worked in the bottoms of a pajama suit without any top, and the last two or three hours there were no gloves. He threw alcohol over himself and was fortunate to have a rag tied around his head as a mask. The former hospital corps man, who was an anesthetist, helped him at the surgical table. He saw no Army surgeons in surgery [this was in accordance with plans already made.—Ed.] and he stated that all patients who came up were tagged, and X-rays came with them—but this system broke down towards the last. He stated that there was some Major in charge of sorting the patients as they came into the hospital, and that the regular Army doctors were out doing field care, and that the wounded had received proper field care.

He said the operating rooms and the equipment were inadequate to take care of a hundred men, let alone the number of patients that were dropped on Tripler Hospital that day. He said that the instruments they had were about the equivalent of the dissecting sets which they had when in medical school.

When he went out he took with him about 5 lbs. of sulfathiazole, but the drug ran out. The Army usually uses iodine for the preparation of the wounds, and this stains the dead tissues very well. About half of the patients that he needed plasma on were able to obtain either plasma or blood, and there was not enough help at the hospital. He stated there were three men working in each surgery; that when he first went out Dr. Benz and Dr. Batten were working in the same room with him, and after they had finished someone else took it up, and there was Dr. Cooper and himself and the third party working in their room. He said there were no plaster supplies and no splints obtainable.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

WM. H. WYNN, M.D.

* * *

On March 9, 1943, I interviewed Dr. Frederick F. Alsup. Dr. Alsup stated that on the morning of December 7, 1941, about 7:30 in the morning, he went to his new home in Woodlawn from their beach place. The first that he was aware of the attack was when he saw the burst of anti-aircraft shells. He then went to the home of a friend, Mr. Henry Davis, on Spencer Street, where he met Mr. Davis and Mr. Davis' son-in-law, who was a military officer (he does not remember the service). Dr. Alsup asked the officer what was going on, and he stated that it was a practice raid, and then remarked, "They're making it pretty real." Shortly thereafter they saw some strange planes come in over the mountains from Waimanalo direction, pass over Diamond Head and turn toward Pearl Harbor (he believes they were yellowish in color) which the officer identified as not belonging to the American forces. The officer still insisted that it was a practice affair well camouflaged, for, said he, "If it was a real attack they would have sent for me." Just at that moment two soldiers drove up in a car and called for him.

About that time a friend of his, Allan Davis, called up and told them that Pearl Harbor was

being bombed. He immediately proceeded to Queen's Hospital and met Dr. Jesse Smith in front of the Hospital, who told him that he was wanted at Tripler General Hospital. He got in Dr. Smith's car and they drove to Tripler General. They were directed to the operating rooms by a Major, where they found some Army doctors already working on the wounded. The corridors were filled. He was assisted by a Lieutenant whose name he does not remember. He stated that he had good anesthetists throughout the day, and that they had an anesthetist who was very good at intravenous anesthesia. He stated that he always had two nurses, and that he ran short of no equipment except when he asked for Thomas splints to transfer the compound fractures to the ward. He states that he took care of all types of cases except head injuries.

He remembers one man whose hip was blasted by shrapnel [i.e., shell fragments.—Ed.] which finally lodged on the other side. One man had his leg shot off at the hip; they were able to stop the hemorrhage and give him a transfusion, but the man died. He recalls one officer who had his thigh badly mangled, and he worked on this case while Dr. R. O. Brown worked on wounds on the same case. When he called for a Thomas splint there was none, and two of them had to hold the leg in place until they got him to the ward. At one stage he ran across a case in which the ureter had been shot in two, and Dr. Brown took over the case and he went to take care of a wounded leg. He remembers a number of smaller wounds—one was a penetrating wound of the calf; he drew a strip of iodoform gauze through the wound and rubbed it back and forth, and then put iodine on the gauze and again rubbed it back and forth. One man who had a flesh wound of his arm whom he cleaned up and sewed up, asked him for his name and was profuse in his thanks to doctors and nurses for the very nice way he had been treated. This was the only instance of this sort. The men generally said nothing. One Lieutenant remarked that he "sure would hate to lose that leg." He stated that no patients complained of having to wait, but that there was one man with a shattered shoulder being operated on on the table next to him without an anesthetic, and the patient screamed with pain. At the same time he was taking care of a more seriously wounded man, and this patient said, "I don't mind all these things but that gets me"—referring to the screaming.

He stated that the Army men downstairs and upstairs in the corridor handled things extremely well. All cases were brought in by Army personnel, and he did not have to move any of the patients himself. He said he probably didn't need as many instruments as many men seemed to think they needed—probably because of the fact that he had had war experience during the last war and had become accustomed to using few tools. He doesn't know how many cases he handled, but he feels in looking back that he, in common with all the other men, tended to overestimate the number of cases which he did. He does not believe that he took care of over ten or fifteen more or less major cases, and perhaps an equal number of minor cases.

He remained at the hospital until about 7:00 p.m., when he returned home. He remained there until about 9:00 p.m., when he was called and asked to come back. He started back at about the time of the second air raid alarm and was detained at Waikiki for some time, so that he did not reach Tripler until about 11:00 o'clock. He then took care of three cases, and left Tripler General Hospital about 3:00 a.m. on the 8th, and then returned home, taking Dr. Jesse Smith with him in his car. They were stopped and investigated on the way home from the hospital, particularly since they had no pass to be out at that time of night.

He stated that Dr. Jesse Smith had been at Tripler Hospital most of the day, and did him a very good turn by going to find out whether or not his family at Diamond Head had been injured. This was probably about the middle of the afternoon, and of course Dr. Alsup had not heard what had happened in other sections of Honolulu. When he left the Hospital the first time about 7:00 p.m. Dr. Smith introduced him to Colonel King. He had not met him before, and stated his greeting was very cordial. He was on duty when Dr. Alsup left the Hospital the second time about 3:00 a.m.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

F. F. Alsup, M.D.

* * *

On February 19, 1943, I talked to Dr. S. Clifton Culpepper. Dr. Culpepper stated that on the morning of December 7, 1941, he was at home, and that his office called him about 9:30 and told him that he was being called by the radio to go to Tripler General Hospital.

He proceeded to Tripler General Hospital and reported to the surgeon in charge, name unknown. He was informed that they had enough surgeons and for him to go to one of the wards and help clean things up, and to select the proper men to

go to surgery and to x-ray. He stated that he had nothing to work with on the ward; that Dr. Eugene W. Mitchell came down to his office and got some instruments and a certain amount of drugs, as the only thing they had at Tripler General Hospital was iodine, morphine and tetanus anti-toxin. There were no dressings on the ward, and the ward boys [corps men?] and outsiders were tearing up sheets and rolling bandages. When Dr. Mitchell returned he and Dr. Culpepper fixed up a surgery in a small room near their ward. They blanketed the windows and hung a blanket around the light in order to reduce any light that might get through. They were left entirely on their own. He stated that an occasional Army surgeon came by and asked if there was anything he could do.

He stated that they had no plasma at any time, and none was given on his ward while he was there. He stated that most all of the surgery that was done on the ward was the removal of pieces of shrapnel. They had a few compound fractures, and these they arranged to have x-rays. The compound fractures were then sent on to surgery. He took care of no penetrating abdominal wounds. He recalled one man who stated that he had been standing about twenty feet from a two or three foot brick wall, when a small Japanese bomb exploded just on the other side of the wall. The man was completely deaf, complained of pain in his chest, was in shock, and had all his hair blown off. There was no otoscope so Dr. Culpepper could not determine if his ear drums were ruptured. He could not find the cause of the man's complaints. He stated that he put in probably about twenty sutures during the day and took out about fifty; that someone, he didn't know who, had taken care of a compound fracture of the arm and had the skin nicely sewed up. He opened up the wound and cleaned it out, implanted some one of the sulfa drugs, and ordered sulfa drugs on this man and every other man on his ward for the first twenty-four hours.

They continued to do this work until about 7:30, when five or six doctors went down to the supply depot where they were able to get knives, scissors, basins, dressings, bolts of gauze, etc. At 8:00 p.m. he was asked to relieve in the surgery, and he remained in surgery doing the routine work until about 2:30 a. m., when he returned to his ward where he remained till about 7:30 or 8:00 o'clock on the morning of the 8th.

He stated that three or four chest wounds were brought to the surgery while he was working in surgery, all of which had been well handled, and it was his feeling that they should not have been sent back to surgery. They apparently had been taken care of in the wards. Most of the chest wounds had been caused by machine gun bullets rather than shrapnel. He mentioned his feeling that it was unnecessary to change these dressings to some Army officers, but they stated that they felt it was better to have them looked at by the surgery and let the surgery take the responsibility.

In the morning when he went down to go home he found one of his tires flat and was rather provoked, feeling that somebody had let the air out in order to be sure to keep the civilian doctors at the hospital. He was informed that the flat tire was caused by an American machine gun bullet, and when he examined his car he found it had seven holes in it caused by other bullets. This made him feel a bit better. He went home in the morning and returned some time thereafter, asking about the dressings, and was told that the patients were all in good shape, and he never saw them again. Monday evening he came back to stand watch as requested, but was sent home about 11:00 o'clock in the evening in a truck, as he would not drive.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

S. Clifton Culpepper, M.D.

NOTES AND NEWS

Dr. Ching Tung Liu has recently opened an office for the practice of neuro-surgery at 1311A Kalakaua Avenue. Among his varied and most interesting experiences in the field of medicine we submit the following brief resume: Dr. Liu graduated from the Peiping Union Medical College, China, in 1938, and then served four years in the Chinese Red Cross with a Field Ambulance Unit attached to the Chinese Army. He was caught by the war and served two years as a colonel in the Medical Corps of the Chinese Army in the field, and for a short time he served under General Stilwell in India. Lack of facilities and knowledge in the treatment of head and nerve injuries in the army led Dr. Liu to seek further training in this field. Accordingly, in 1944 he became a contract surgeon to the First Service Command at Boston, Mass., and was assigned to the Cushing General Hospital under Dr. William P. van Wagenan. He then spent a year as resident surgeon on the neurosurgical service at the Massachusetts General Hospital under Dr. James White, during which time he and Dr. White wrote a paper on epilepsy. He next spent six months at the Lahey Clinic under Dr. Gilbert Horrax, and finished his training with a year's residency at the Graduate Hospital of the University of Pennsylvania under Dr. Robert A. Groff.

Dr. George Tyau has resumed his practice after an extensive trip to the mainland. While away Dr. Tyau spent three days at the A.M.A. convention in Chicago, made a short visit to his alma mater, Jefferson Medical College, and then took his family for an extended tour of the mainland for rest and relaxation. They visited the east coast, New England, Canada, and across Canada to Victoria, then down the west coast to San Francisco—all by automobile. The doctor regrets that because of the strike he had to leave his new car on the dock at a west coast port.

After a five years' absence from the islands Dr. Richard C. Durant has reopened an office in the Young Hotel building for the practice of general surgery. While away and in the Naval Service he spent two and one half years at sea as Senior Medical Officer of the U.S.S. West Point (formerly the "America") and covered nearly 300,000 sea miles. On his last tour of duty he spent nine months as Chief of Surgery at the U.S. Naval Hospital, United States Naval Academy, Annapolis, Md.

Dr. Thomas Mar has recently opened an office at 43 South Kukui Street for the practice of Pediatrics. Dr. Mar graduated from Iolani before attending the University of North Dakota, and the University of North Dakota Medical School. He graduated from New York Medical College in 1940, and had a rotating interneship at North Hudson and Margaret Hague Maternity Hospitals. He then entered the U.S. Army Medical Corps and was assigned to a tank unit which spearheaded the fall of Bizerte and the invasion of Italy at Salerno. Following the war he did graduate work in pediatrics at the New York Medical College, and then spent a year at Queen's General Hospital, Long Island. Dr. Mar is married and has one offspring.

Dr. H. S. Dickson has just returned from a trip to the mainland which was "purely for rest and relaxation." He spent most of his time at Sun Valley, Idaho.

Kuakini Hospital announces the arrival of three new women internes on their staff, Dr. K. Shitamoto, formerly of Lahaina, Maui; Dr. F. Yasuda, of Hamakua, Hawaii, and Dr. S. Uyeda of Honolulu, all graduates of Tokyo Women's Special Medical College. Dr. S. Cholst of Long Island, New York, a graduate of Long Island Medical College in 1948, is also a new interne at Kuakini. He plans to specialize in psychoanalysis.

Dr. Dana Foster Richards, an interne at Queen's Hospital, will join Kapiolani's resident staff officially on February 1, 1949.

The Queen's Hospital has added Dr. Wallace E. Chin, a native of Honolulu, to the interne staff. He is a graduate of the College of Medical Evangelists, in Los Angeles, in 1948. Joining their resident staff is Dr. Chew Mung Lum, a native of Honolulu, who is assistant resident in medicine. He is a graduate of the Northwestern University School of Medicine in 1947 and interned at the Wesley Memorial Hospital, Chicago.

The St. Francis Hospital now has the following additional members on the interne staff: Dr.

Sydney T. Fujita, of Kauai, a graduate of the Temple University Medical School, Philadelphia, in 1948; Dr. Robert John Steinborg, a graduate of the Emory University Medical School, Atlanta, Georgia, in 1948, and Dr. William P. Murphy, Jr., a graduate of the University of Illinois, in 1947. Additions to the rotating resident staff are: Dr. Jerome Peacock, a native of Honolulu, who is a graduate of the Cornell University Medical School in 1946 and interned at the Bellevue Hospital, New York City; Dr. Stanley M. Saiki, who is a graduate of the Temple University Medical School and interned at the St. Joseph Hospital, Philadelphia. This was followed by a surgical residency at this hospital. Dr. Alpha Bailey Baldwin, a graduate of Creighton University School of Medicine in 1947, served her interneship in the Children's Hospital, San Francisco, before joining the St. Francis resident staff.

Dr. Harold T. Kimata, a native of Kauai, has opened his office in Honolulu for the practice of ophthalmology and otolaryngology. He is a graduate of the University of Hawaii and of the University of Louisiana School of Medicine in 1936. He took graduate training in his specialty at the New Orleans Eye, Ear, Nose and Throat Hospital as well as at his University. During his service in the Army he served as chief of the Eye, Ear, Nose and Throat Department at the 305th Station Hospital and later with the 216th General Hospital in Europe. He was discharged from the Army in 1946 with the rank of Captain. Dr. Kimata has been certified as a specialist by the American Board of Otolaryngology and is a Fellow of the American Academy of Ophthalmology and Otolaryngology.

Dr. John Kometani, a native of Honolulu, has returned to open his office for the practice of pediatrics. He is a graduate of the University of Minnesota School of Medicine and practiced in Honolulu for a number of years before returning to New Orleans to specialize. There he completed twenty-six months of training at the Tulane University as a fellow in pediatrics and later as an instructor. He has been certified by the American Board of Pediatrics.

Dr. H. Joseph Simon, of Honolulu, has opened his offices for the practice of psychiatry and neurology. He is a graduate of the University of Colorado in 1943, and interned at The Queen's Hospital. After a year as psychiatric resident there he practiced with Dr. William Bergin, at Pepeekeo, Hawaii. He has completed three years of graduate training in his specialty on a Commonwealth Fund Fellowship at the Colorado Psychopathic Hospital, Denver, under Dr. Franklin G. Ebaugh. Dr. Simon is a member of the American Psychiatric Association.

Dr. and Mrs. John W. Devereux, of Honolulu, have returned from an extended mainland visit, where Dr. Devereux visited at the Mayo Clinic, Rochester, Minnesota and hospitals in Ann Arbor, Michigan and Chicago. He also visited the Atomic Energy Project at Oak Ridge, Tennessee.

Dr. Teru Togasaki, a native of San Francisco, has opened her offices in Kaimuki, Honolulu, for the general practice of medicine and surgery. She is a graduate of the University of California Medical School, in San Francisco, and has taken resident training at the Triboro Hospital for Chest Diseases, Long Island, N.Y. She has recently served an eighteen months' rotating residency at the St. Francis Hospital, Honolulu. Previously she practiced in Sacramento, California.

Dr. Clifford K. Kobayashi of Paia, Maui, has opened his office in Honolulu, for the practice of pediatrics. His pre-medical education was received at the University of Hawaii and the University of Iowa where he received his M.D. degree in 1944. He served his interneship at The Queen's Hospital and practiced with Dr. Fred Lam for a few months. He has recently returned from a twenty-eight months' residency in pediatrics at the University of Iowa.

Dr. and Mrs. Richard Sia, of Honolulu, have returned from a mainland visit to Boston and New York. While there they celebrated their 25th wedding anniversary, and also attended the wedding of their daughter, Sylvia, to Mr. Donald Tsai, a Fellow in the Sloan laboratory of Harvard University.

Dr. Colin McCorriston, of Honolulu, will return December 14, after three months in Boston studying under Dr. Arthur T. Hertig.

Among those attending the College of Surgeons meeting in Los Angeles in October were: Dr. Lylé Phillips, Dr. Kwan Heen Ho, Dr. Steele Stewart, Dr. Lawrence Wiig, Dr. L. A. R. Gaspar, Dr. Douglas Bell, Dr. Harold Johnson and Dr. Shoyei Yamauchi, of Honolulu, and Dr. Marvin Brennecke of Waimea, Kauai.

Dr. and Mrs. F. Bernard Schultz, of Honolulu, have returned from a trip to Chicago where Dr. Schultz took a course in cardiology at the Michael Reese Hospital and visited in Baltimore and Washington, D. C.

Dr. Edward F. Cushnie, of Honolulu, returns in December from a three-month post-graduate study at Margaret Hague Maternity Hospital in New Jersey.

Dr. Joseph Palma, of Honolulu, State Chairman for Hawaii and member of the Committee on

Reorganization, of the American Academy of Pediatrics, attended the meeting of the Academy in Atlantic City, November 18-23.

Dr. and Mrs. Barrister A. Richardson, formerly of Kona, have announced the birth of their second child, a girl, Allene Kaleimomi, who was born in Philadelphia on September 16. Dr. Richardson is at present taking a three-year orthopedic surgery residency at the University of Pennsylvania.

Dr. and Mrs. Bryant Wedge, of Honolulu, are the parents of a son, Daniel Bryant, their first child, who was born in Honolulu on September 10. Dr. Wedge left recently to take a three year graduate course in psychiatry and neurology at the University of Chicago.

Dr. and Mrs. Louis Laurence Buzaid, of Honolulu, are the parents of a son, Laurence Edwin, their first child, born October 5, in Honolulu.

Dr. Wayne Wong, of Honolulu, was married to Miss Mable G. Lee, daughter of Mrs. Leung Shee Lee of Corvallis, Oregon, on October 6 at Wailuku, Maui.

Dr. and Mrs. Laurence Wiig, of Honolulu, have returned from a mainland trip, during which he attended the meeting of the American Cancer Society in New York City, after spending several weeks in Rochester, Minnesota. He visited in Reno, Nevada, with his brother, Dr. Paul Wiig, formerly of Honolulu, after the latter was inducted into the American College of Surgeons, at the Los Angeles meeting.

Dr. and Mrs. Grover H. Batten, of Honolulu, are the proud parents of a daughter, Lynne Douglass Batten, born September 23. This is their first child. Dr. Batten is a resident at Queen's.

Dr. and Mrs. Raymond Merrill deHay, of Honolulu, announce the birth of their second son and third child on October 12. He has been named Roger. Dr. deHay is resident physician at Queen's Hospital.

Dr. and Mrs. Harold M. Johnson returned in October from a two weeks' vacation in California.

Dr. Harold M. Chandler was discharged from Queen's Hospital on October 26, following treatment for a fracture of his right lower leg.

Dr. Philip M. Corboy made a trip to the mainland to attend the Eye, Ear, Nose, and Throat Association meeting at Chicago and for other business connected with the Civil Aeronautics Association. He returned to Honolulu November 3.

Dr. Paul Withington has returned from a trip to the mainland which was largely in connection with his duties as chairman of the Territorial Boxing Commission. He attended the National Boxing Association meeting at Philadelphia, and several intersectional football games, and looked up all but three of his relatives, who were as closely related to him as a second cousin. He states the trip offered him "little rest, but plenty of relaxation."

A NEW SLANT ON MOVIES

Announcement has just been made of a motion picture producer who is publishing a booklet describing how to prepare your film before sending it to a recording studio to have it converted from a silent to a sound version. This booklet furnishes simplified footage scale charts, lay-out for the preparation of your script and other important information.

All 16 mm. film, whether photographed at 8, 16, 24 or 64 frames per second, is adaptable to sound. After the film, whether black and white or color, is prepared, a high fidelity sound track can be placed on your film by this producer for a very nominal fee.

These booklets, #6922 entitled "Make Your Movies Talk," can be obtained without charge by writing the C. Lawrence Walsh and Company, 801 Brighton Road, Pittsburgh 12, Pennsylvania.

HAWAII DERMATOLOGICAL SOCIETY

The seventh meeting of the Hawaii Dermatological Society was held November 6. Several patients were demonstrated and discussed. Drs. Samuel Allison, Cyrus Loo and J. H. Cox, Commander, M.C., U.S.N., were elected to membership in the Society. The transactions of the meeting will be published in the *Archives of Dermatology and Syphilology.*

HONOLULU ACADEMY OF GENERAL PRACTICE

A regular meeting of this society was held in August at which time a paper on Toxemias of Pregnancy was presented by Dr. Frank C. Spencer and a paper on Fees and Fee Schedules was given by Dr. Howard Liljestrand.

HONOLULU OBSTETRICAL AND GYNECOLOGICAL SOCIETY

At the last regular meeting held in the Mabel Smyth Lounge the program consisted of a paper on Orthopedic Aspects of Delivery and of the Newborn by Dr. R. Nelson Hatt and a color movie on the Physiology of Menstruation. Membership in this society is open to all physicians interested in Obstetrics and Gynecology. This group meets regularly on the third Monday of every month, in the evening, at the Mabel Smyth Building.

ASSISTANT AVAILABLE: Young physician, Stanford graduate, offers services to general practitioner for any period between January 1, 1949 and June 1, 1949. Inquire: Victoria Medical Building, 1221 Victoria Street. Phone: 58880 or 59004.

CORRESPONDENCE

Editor, The Journal of the
American Medical Association

It has come to my attention that considerable misunderstanding has developed throughout the medical profession concerning the establishment of fees for medical services to be paid private physicians participating in the so called "Home Town Medical Care Program for Veterans." It has been contended that the Veterans Administration has arbitrarily established a Fee Schedule which represents the maximum amount which may be paid for any given service and which is, in effect, a National Fee Schedule. It has also been contended that the various State Medical Societies and other interested groups were not consulted when this Fee Schedule was adopted.

In order to clear up any misunderstanding regarding this matter, it is desired to emphasize that my predecessor, Dr. Paul R. Hawley, had no intention at any time of establishing a National Schedule of Fees, nor do I contemplate doing so. However, the Fee Schedules originally submitted by the various State Medical Societies, when the "Home Town Medical Care Program" was inaugurated, varied so widely in format, terminology, and fees for similar or identical services, that it was deemed advisable to establish a uniform Fee Schedule Format and to set up tentative fees which could be used as a guide by the various State Medical Societies when submitting their proposals for the furnishing of medical care to veterans.

This uniform Fee Schedule Format was formulated by the Professional Group of National Consultants to the Chief Medical Director. This Group, representing the various specialties in medicine and surgery, is composed of eminent physicians from all parts of the country. Tentative fees were set up in the format after a careful analysis of Pre-Paid Medical Care Plan, Workmen's Compensation and Insurance Fee Schedules, and also the Fee Schedules in effect in the various States having agreements with the Veterans Administration. As was to be expected, considerable variation occurred in the Fee Schedules reviewed.

The Professional Group of National Consultants made every effort to arrive at fees that were considered to be within reasonable limits and which would, as nearly as possible, allow a uniform provisional fee schedule for use as a guide in facilitating and expediting the preparation of agreements between State Medical Societies and the Veterans Administration.

Further attempt was made to provide for elasticity in the charges for certain operations or other services which seemed to evoke more than average contention by listing the minimum and maximum amounts considered equitable. These items bear the notation "AA", which indicates that the fee for the given service is to be determined by arbitration and agreement between the Veterans Administration and the Medical Society concerned.

May I reiterate that the Veterans Administration Fee Schedule Format is in no sense to be construed as an arbitrary or National Fee Schedule. Furthermore, it is subject to periodic review and such modification as conditions may indicate.

If it meets with your approval, I would appreciate it very much if you could possibly arrange to publish this as an open-letter in the *Journal of the American Medical Association.* I should like this to reach all of the physicians throughout the country, and I know of no better way to do it than through the *Journal.*

PAUL B. MAGNUSON
Chief Medical Director
Veterans Administration

April 27, 1948

* * *

Secretary
Territorial Medical Association

The Veterans Administration has established the following restrictions in the utilization of the services of retired military officers receiving retirement pay for other than combat incurred disability or injury due to the explosions of an instrumentality of war:

1. Such a retired officer may be employed as consultant only when he is outstanding in his medical specialty and is the best available for consultation purposes in an area or is the only specialist available in an area.

2. Such a retired officer cannot be utilized as fee basis physician to render service to veteran patients in his own offices or at a VA station. This restriction applies to a physician whose services are utilized through an intermediary such as the Territorial Medical Association.

It would be appreciated if you would disseminate this information to the professional members of your society, as the General Accounting Office, Washington, D. C. may require recovery of funds expended in violation of these restrictions.

H. H. DARLING, M.D.
Assistant Branch Medical Director
Veterans Administration

October 22, 1948

* * *

Has made arrangements through its Journal to secure MEDICINE OF THE YEAR for those of its members who wish to subscribe. MEDICINE OF THE YEAR is an annual review of medical progress which will appear as a supplement to the Journal early in 1949. It will be a descriptive and analytical account of progress in medical science and practice during the preceding year presented in a practical, useful, and informative manner, particularly as it relates to the everyday practice of general medicine and the specialties.

The editorial management is under the direction of Dr. John B. Youmans, Dean, College of Medicine, University of Illinois. The principal contributors and their subjects are the following well-known medical educators and writers:

Internal Medicine—Dr. Hugh J. Morgan, *Professor of Medicine, Vanderbilt University, Nashville, Tennessee.*

Obstetrics—Dr. Frank Whitacre, *Professor of Obstetrics and Gynecology, Memphis, Tennessee.*

Pediatrics—Dr. Henry G. Poncher, *Professor of Pediatrics, University of Illinois, Chicago, Illinois.*

Surgery—Dr. Warren H. Cole, *Professor of Surgery, University of Illinois, Chicago, Illinois.*

These men will have associated with them an equally competent and distinguished group of authors in special fields.

This annual review of medical progress is being offered to members of state medical societies and subscribers to state medical journals. Of the subscription price your Association will retain a part to defray any costs associated with the announcement of this service and the handling of subscriptions. In order to secure this service, subscriptions from approximately one-third of our members and subscribers is required. Because of the short time available, subscriptions must be entered promptly. DO NOT DELAY. Send in the coupon below, or write directly, sending check or money order. If an insufficient number of subscriptions is obtained, no obligation will be incurred and your money will be refunded. ACT NOW.

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Official Publication of the Nurses' Association, Territory of Hawaii

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THE SEVENTEENTH ANNUAL CONVENTION NURSES' ASSOCIATION, TERRITORY OF HAWAII

Dues

Nurses of the Territory proved they are ready to shoulder the responsibilities of a really active, forward-working professional association when they voted unanimously to raise Territorial Association dues at the 17th annual meeting in September.

Although many individuals felt that the Association was ready to put forth a strong program of community participation and a well-rounded program within the Association itself, no one realized that this feeling was shared by so large a percentage of the members.

Since the proposal to raise dues in the Territorial Association to cover a budget which might be considered "adequate" was not circulated in advance, a unanimous vote in the House of Delegates was required to make an increase effective.

The roll was called. Each delegate, representing ten members of her district association, responded, "Aye!"

The House of Delegates also voted to mandate the Board of Directors to proceed with an economic security program such as that sponsored by the American Nurses' Association, which seeks furtherance of the public's health through promotion and protection of the welfare of the professional nurse.

The finance committee presented what it considered the lowest possible budget to cover running expenses and to include the services of a qualified executive secretary, expenses for a delegate to the Biennial, subscriptions for the INTER-ISLAND NURSES' BULLETIN, and a small sum for expenses incurred by standing committees. They recommended an increase of $9 in dues, making a total of $17 Territorial Association dues. (This is in addition to district dues, of course.)

An executive secretary for the Territorial Association seems indicated at this time when nurses are being called on increasingly to assume their responsibilities on community agency boards and as representatives of their profession in many other phases of public life.

It is expected that this executive secretary will do some counselling and guidance—a field in which there is much work to be done in Hawaii.

The item in the budget covering expenses of a delegate to the American Nurses' Association biennial meetings has long been needed. In the past, the Association has been dependent for its representation upon nurses who had planned to attend the biennial as delegates from some other group or who had planned it as part of a vacation or business trip to the mainland. Obviously, the Association cannot expect such persons to attend all of the sessions, nor to attend a multitude of meetings on their return to pass on the information obtained at the Biennial.

If the Association finances the trip of a delegate, it will have the assurance that the person going will attend all of the important meetings; that she will return to Hawaii and attend the necessary committee meetings to relay the information; and that she will take an active part in Association work as a result of having had the broadening experience of attending a Biennial.

Subscriptions to the INTER-ISLAND BULLETIN have been financed in the past by the district associations. This has meant sponsoring money-raising events, selling calendars, etc. Many members have expressed a desire to include the amount of the subscription in their dues. The increase in dues will accomplish this.

An item of $200 was included in the budget to cover special expenses incurred by committees. Last year the wages, hours, and personnel committee sent questionnaires to all nurses registered in the Territory. It is expenses of this nature or those of the now active information committee which this amount is intended to cover.

In announcing the unanimous vote on the increase in dues, Miss Virginia Jones, president of the Association, said, "A miracle has taken place." However, the build-up for the miracle has been going on for some time with the realization of nurses in general of the importance of their profession in the world of today and their responsibility for going ahead. Since this year marks the 75th anniversary of professional nursing in America, it seems apropos that the Territorial Association chose 1948 to give itself a vote of confidence—a unanimous vote to pay its own way on more than a "subsistence" level.

New Officers

Officers and directors for the ensuing year include:

Virginia Jones, president
Mildred Pinner, first vice president
Arlene Thompson, second vice president
Olga Larsen, secretary
Tamai T. Fujii, treasurer
Directors: Esther Stubblefield; Elizabeth Middleton, Kauai; Myrtle Schattenburg; Hazel Mattson; Thelma Patten, Hawaii; Ethel H. Brown; Elizabeth Sheridan, Maui; Esther Kekela.

Resolutions

The House of Delegates resolved to:

1. Develop an economic security program in line with that sponsored by the American Nurses' Association.

2. Cooperate with other agencies interested in public health to raise the ratio of public health nurses in the Territory from 1:4,800 on the outside Islands and 1:10,000 on Oahu to 1:5,000. (The approved ratio of public health nurses in a total program is 1:3,000.)

3. Accept changes in the by-laws as presented by Constitution and By-Laws Committee.

4. Increase the annual dues to $17 per capita, payable on or before January 15 by the constituent district associations, which includes $3 per capita dues to the American Nurses' Association.

5. Obtain lawful exemptions from the payment of Federal income tax on amounts spent for uniforms and their upkeep and to clarify this privilege with the Federal tax officials in the Territory.

6. Instruct the Legislative Committee of the Nurses' Association, Territory of Hawaii, to obtain information about the legislation being supported by the Oahu Health Council for dissemination to the district association for support and action.

7. Elect Dean Arthur R. Keller an honorary member of the Nurses' Association because of his interest and assistance in developing nursing education in the Territory.

8. Send a letter of appreciation to the American Nurses' Association for having sent two associate executive secretaries to attend the 17th Annual Convention; a letter of appreciation to each member of the Program and Arrangements Committee; a letter of appreciation to each exhibitor and also one to the manager of the Mabel Smyth Memorial Building for her splendid assistance in making the meeting a success.

Nurses' Association of the County of Hawaii

A summary of this Association's report appeared in the previous Bulletin. Officers for 1947-48 are:

Jettie Jacobson, president
Roberta Lindberg, vice president
Bess Hammer, secretary
Hideko Kagimoto, treasurer
Board of trustees: Mary Jean MacDonald, Josephine Hall, Mae Marcellino

Maui District Nurses' Association

Officers for 1947-48:

Elizabeth Sheridan, president
Laura Wong, vice president
Dorothy Kirchner, secretary*
Miriam Schmidling, treasurer
Board of trustees: Rose Litell, Hiroko Watanabe, Mary Martin
(* Succeeded by Mildred Manty in September 1947.)

Kauai Nurses' Association

Officers for 1947-48:

Claire Carra, president
Elizabeth Middleton, vice president
Grace T. Furugen, secretary-treasurer
May Jenkins, acting secretary-treasurer
Directors: Mabel I. Wilcox, Thelma Hensley
Trustee: Elizabeth Middleton

There are 42 paid up members of the Association. All nurses actively engaged in nursing on Kauai are members of the Association.

Report of the Membership Committee

The Membership Committee's goal was to increase membership. Compared with December 1947, there has been an increase of 16 per cent up to August 1948, with a membership now of 773. In 1946 only one third of all registered nurses were members of the Territorial Association; in 1947, one half were members. The personal approach has been found to be much more effective than the sending of an impersonal letter to non-

members. Also, committee members represent the larger hospitals and other nursing groups such as private duty and public health nursing.

In contacting non-members many problems were encountered. The committee members tried to sell the benefits of belonging to the Nurses' Association. The most receptive group was recent graduates; the least receptive, nurses who planned to remain in the islands for a short time only. It was important to contact non-members early in the year as many did not feel enthusiastic about joining if they had missed a couple of months. On the other islands where the nurses are so scattered, transportation to meetings is a problem and efforts have been made to hold meetings in different locations.

The Publicity Committee is busy at present informing nurses and laymen about the activities of the Nurses' Association, pointing out the many benefits to be derived through the efforts of the organization. The Membership Committee has met with this Committee to plan programs that will interest and attract non-members.

Future plans include work with students to make them acquainted with the activities of the Nurses' Association and give them a desire to accept their professional responsibilities as new graduates; organization of an office duty section; and, obtaining the cooperation of nursing schools, alumnae associations, superintendents of hospitals, instructors, etc., in enlisting members.

The chief problem is to get nurses to see that they have a professional responsibility and that one way to fulfill that obligation is to belong to the Nurses' Association, because the future of nursing rests on them.

DOROTHY TONG, *Chairman*

Nursing Information Committee

Members:
Mrs. Myrtle Schattenburg, Chairman
Mrs. Laura Wright, Office Secretary, Nurses' Association
Miss Violet Buchanan, Editor, INTER-ISLAND BULLETIN
Miss Myrna Campbell, Chairman, Program Committee, C&C of Honolulu
Mrs. Dorothy Tong, Chairman, NATH Membership Committee
Miss Olga Larson, Secretary, Nurses' Association
Mrs. Helen Gage
Miss Elizabeth Middleton, Kauai
Miss Roberta Lindberg, Hawaii
Miss Mildred Manty, Maui

Since the committee was activated in May 1948, one general meeting has been held with most members present, except outer island representatives. At that time plans were made for a program of wider use of the INTER-ISLAND BULLETIN, especially along educational lines; also a closer cooperation with both the Territorial Membership Committee and the Program Committee of the Honolulu City and County organization.

Objectives: Wider use of all media available to interpret nurses and nursing to our own members and to non-members and the public at large.

Recommendations: To secure more people to work actively on objectives as stated above and to establish a budget to carry on better planning of nursing information.

To date 30 news articles, some with pictures, have been published in the daily papers. The *Paradise of the Pacific* magazine will carry a story, "The Mabel Smyth Memorial Building" written by Mrs. Laura Wright with pictures taken by Mr. Wing Tong, husband of Dorothy Tong.

The *Oahu Health Council Bulletin* carried a pre-convention story in its September issue.

MYRTLE SCHATTENBURG, *Chairman*

Library Committee

There is no continuous source of income for the purchase of books. However, the Margaret Jones Memorial Fund Committee has suggested that the Library Committee list its needs each year and present a request for an amount to cover. If there is money available, the Fund will appropriate money for the Library Fund. This will be in addition to the annual sum of $500 allotted for the Medical Library Endowment Fund.

The Librarian, Mrs. Hill, reported that there are 156 books on the shelves which have been presented by the Nurses' Association.

It is recommended that more nurses make use of our exceptionally fine library and that various nursing groups present a written request to the Library Committee for new books desired for the Library.

MARGARET WONG

Scholarship Committee, Hawaii Chapter, National Foundation for Infantile Paralysis

This Committee receives, reviews and recommends action on applications for scholarships to the Hawaii Chapter, National Foundation for Infantile Paralysis. Most scholarships are granted to nurses, medical social workers, physical therapists and health educators. Your representative was asked to determine the number of nurses needed to be trained in the field of orthopedic nursing and to recruit suitable candidates. A meeting of hospital and public health nurses was called and a report submitted to the Committee. Few nurses have applied for scholarships for study but all qualified applicants have been granted liberal help.

VIRGINIA A. JONES, *Representative of Nurses' Assn., Territory of Hawaii*

Report of the Board for Licensing of Nurses

At the last annual convention of the Association a resolution was passed asking that the Board for Licensing keep the Association informed of its activities. This we are proud to do for we believe much progress has been made. At the time of the last report made in May 1947 the Board was starting from scratch to do many things which it had never done before: i.e. to

Formulate policies for accrediting schools of nursing both for professional and practical nurses.
Set up minimum requirements for professional schools of nursing.
Formulate minimum requirements for practical nurse schools.
Set up machinery for licensing and re-registering practical nurses.
Revise old and formulate innumerable new blanks for carrying on the accreditation and licensing procedures.
Interpret and explain the functions of practical nurses and the need for their education and control.

The Board has met regularly once a month and has had frequent additional meetings. However, the work could not have been done without the help of committees who drafted requirements, formulated blanks and evaluated policies. Special thanks go to these people for the many hours of thought and work put into these activities.

Committee to formulate minimum requirements for *Schools of Nursing:* Miss Annette Bilger, Miss Mary Hugo, Miss Miriam Keller, Mrs. Mildred Pinner, Mrs. Marjorie Elliott, Miss Josephine Valentine, Miss Virginia Jones.

Practical Nurse Schools: Mrs. Gardner Black, Mrs. Dorothy McClintic, Miss Myrna Campbell, Miss Hope Romani, Miss Cecelia Conrath, Mrs. William Coulter,

Mrs. Hazel Mattson, Mrs. Margaret Wong, Miss Charlotte Kerr, Miss Evelyn Schoen.

Legislation and Licensing: Miss Dorothy Blank, Miss Laura Draper, Miss Virginia Ahrendt, Miss Julia Hamada, Miss Agnes Peterson, Dr. Thomas Mossman, Miss Albertine Sinclair, Sister Jolenta.

Copies of Board policies and requirements and blanks used for licensing and accreditation may be obtained upon request to the Board office.

This year 1,472 professional nurses re-registered in the Territory and 432 new licenses were granted by examination or reciprocity—a total of 1,904 registered nurses.

Since September 1946 the League State Board Test Pool has been used. Reports from the September 1947 examinations show that the average mean of grades for Hawaii was higher than the mean for 31 states using the pool in all areas of the examination, and in six areas Hawaii had the highest average mean of any of the states. We were lowest in Social Foundations. It is a great satisfaction to you all, we feel, to have this means of comparing our graduates' performance on examinations with other states and especially to have that comparison turn out so favorably.

There were 776 licenses granted by waiver to practical nurses in 1947. Of these, 415 registered in the first annual re-registration. In August, 17 graduates of the year-old practical nurse training course offered by the Department of Public Instruction, took the Practical Nurse Competency test given by the National League of Nursing Education plus a practical test given locally. Three tests a year will be given for practical nurses since three groups will be graduating each year. Another class will graduate and be examined in October. To date, 981 have been granted licenses.

Mrs. Laura Wright, who is part-time secretary for the Nurses' Association, has taken Miss Eyman's place as part-time office secretary for the Board of Licensing. Miss Helen Oyama, clerk, has carried the great burden of clerical work.

An effort has been made to make each nurse who comes to the Board Office regarding licensure, usually by reciprocity, acquainted with the Association office, Mabel Smyth Building, Nursing Service Bureau, and the facilities available for nurses in the Territory.

The Board owes a special vote of thanks to Dr. John Devereux, who is serving one term on the Board and who has been most valuable in interpreting the Nurse Practice Act and the regulations of the Board to physicians, especially in relation to practical nurses.

VIRGINIA JONES, *Chairman*

Legislative Committee

In March a letter was received from Dr. R. Faus, Chairman of the Oahu Health Council Legislative Committee, requesting the opinion of the Board for Licensing of Nurses regarding the proposed legislation for subsidization for nursing schools. The Board endorsed such action providing the bill stated such appropriations would be administered by a Territorial Board or Institution properly equipped to supervise nursing education, such as the Board of Licensing. This proposed legislation was then presented and endorsed at the May meeting of the Oahu Health Council at which several members of the Legislative Committee took an active part in the discussion.

On July 27 Dr. Faus was again contacted as no further word had been received regarding the parties that might be actually drafting the bill, and at this time the Committee was assured by him that the Oahu Health Council would not sponsor any legislation of this nature unless it had been approved by the Board of Licensing.

In May this Committee received a copy of the proposed bill for Federal Aid for Nursing Education presented in Congress by Mr. Thomas of Utah on April 30. Upon reading it over it was found that as presently stated, Hawaii was not included. Letters were immediately written to the American Nurses' Association and Delegate Farrington, calling attention to this. A letter from Delegate Farrington assured us, however, that Hawaii would be included as this was an amendment to the Public Service Act which specifically includes the Territories of the United States.

At present this Committee is contacting states that already have legislation subsidizing nursing schools to request information that may be used as reference material at such time as the Committee might be called upon to assist with the formulating of similar legislation.

D. RISH, *Chairman*

Wages, Hours and Personnel Policies Committee

During this entire year, this Committee has had an acting chairman. It was hoped that the work accomplished and the members active in it would stimulate interest among other members to serve on this committee and to follow through this important activity. This, I believe, has been accomplished.

It has been necessary to spend a great deal of time on those activities which belong to the whole wide field of public relations. Much time and thought has been given by your chairman to working on projects which we have in common with the Hawaiian Government Employees' Association, The Hawaii Education Association and other voluntary agencies whose aims are ours and whose assistance we can well use. It is my hope that the results of this work will be effective and assist this year's chairman and those following her.

The project which could be done only by and for nurses has been the wages, hours and personnel policies study. An overall committee was appointed to draw up and send out the questionnaires which you all have received and, as they were returned, small committees composed of nurses in the different fields have evaluated them. I believe that this study deserves a carefully planned report of its own and you should all receive the findings as soon as this can be prepared. All reports are now ready to be returned to the over-all committee to be consolidated. The names of the members of our Association who have done this work are too numerous to mention, but I would like here to thank every one for doing such a fine job. I have read the reports and the recommendations attached and concur with them all. Action upon them can begin at once.

There are a few observations which the over-all committee was able to see clearly even before the returns were studied.

1. 1400 questionnaires were sent out from the Licensing Board files. At the last count 701 had been returned. The statisticians tell us that 50 per cent is a good cross section of any group. For once the public health nurses did not win by numbers. The greatest number returned were those marked "non-nursing": either in other work or, more often, retired. It is easy to see in this retired group a great source of assistance for our Association work. Any retired nurse who takes

the trouble to carefully fill out such a questionnaire and even, as some did, write in recommendations, has not lost her interest in nursing. I wish we could find some way to get these nurses working for and with us.

2. We found out very soon that very few nurses know how, or take the trouble, to read and fill out a questionnaire. As our numbers grow and as we need more information of this sort, we must depend on the questionnaire type of survey. Perhaps it needs to begin in our nursing schools, but I hope there is something we can do to teach our nurses to read and fill every space.

3. There is a definite need for nursing classifications to be set up and defined for Hawaii. Is a nurse who works in a plantation hospital a hospital or an industrial nurse? Many of them do not know. Is the visiting nurse on the plantation in industry or public health? Where does the dispensary nurse fit in? With those in the outpatient department of the big hospitals?

4. The Nurses' Association itself should carry out an educational program for its members on many subjects about which they are ill informed. The hospital nurses do not know which of them are covered by unemployment compensation insurance. The nurses employed by government do not know to what extent their retirement plan is employer-shared. I believe that some articles in our BULLETIN by people well qualified to explain these subjects would be welcomed by our membership.

This is a stimulating job which I have been doing, and I only wish that I could stay here and finish it. I am most grateful to all of you who have helped, and to the members of my committee, who have been very understanding.

F. HELEN GAGE, R.N., *Acting Chairman*

Report of the Nurses' Association Representative on the Advisory Board of the Practical Nursing Course, Vocational Dept., DPI

Through the efforts of the Community Nursing Council and the Oahu Health Council $8000 was obtained from the Public Health Committee of the Honolulu Chamber of Commerce to enable the Honolulu Vocational School of the Department of Public Instruction to open a practical nurse training course.

The planning for and opening of this project has been written in our BULLETIN and given at Oahu Health Council meetings, so that it needs no further explanation here.

Never having had any sort of school of nursing before this time, the Vocational Department appointed an Advisory Committee which has met six times this year to assist with the school. The Committee is made up of representatives from the Community Nursing Council, hospitals and organizations where the students affiliate, the Department of Health, the Hawaii League of Nursing Education, the Board for Licensing of Nurses, the Public Health Committee of the Chamber of Commerce and the Nurses' Association, Territory of Hawaii. This Committee has been called upon for advice on everything from the enlargement of the course to what color hose should be worn at graduation! The growth of the course, in both scope and permanency, has been remarkable.

A part-time home economics teacher and a part-time supervisor for home nursing have been employed since the course started. The classroom has been enlarged and the foods laboratory has been moved so that the school is all on one floor. Both instructors have visited the other islands in the interest of recruitment and affiliations. The Vocational Evening School has started an evening course for those unable to take the regular course because of their being employed and already licensed on waiver. It was even possible for Mrs. Schattenburg, on her trip to the mainland, to visit two well established mainland schools.

Too much credit cannot be given to Miss Valentine and her Committee for their planning of this course and their far-sightedness in being aware of what problems would come up and how they should be met.

The budget for the next biennium has been submitted and approved by the Department of Public Instruction and the Commissioners. It is now lost in the total budget of the Vocational Schools. Although both political parties have pledged their support of the Vocational School program, it is important for every nurse who knows a voter or a candidate to see that this budget goes through the legislature without any cut, if we are to continue the program for which the Nurses' Association is so largely responsible.

F. HELEN GAGE, R.N.

Nursing Activities Committee American Red Cross

The Hawaii Chapter, American Red Cross, is in the process of organizing Nursing Activities Committees on a territory-wide basis, relative to the new Red Cross Enrollment plan.

The principal objective of the new plan is to provide greater benefits to each locality through the combined efforts of nurses serving in Red Cross health programs as well as in disaster. Emphasis is placed on strengthened programs in a peace time era of community service, while the primary objective of the old and now discarded program was to have a country-wide nurse roster maintained primarily for national emergency purposes.

Since the Army and the Navy now have their own Nurse Reserve Corps, the Red Cross Nurse Corps will be set up to give voluntary service in time of disaster as well as to carry on the teaching programs in which the Red Cross Nurses have always participated. The purposes of the new plan are:

To develop in chapters a roster of well prepared nurses to be called upon for service to communities through the various Red Cross Programs.

To stimulate through planned contacts with schools of nursing the development of a permanent roster of Red Cross Nurse volunteer workers.

To maintain nurse recruitment machinery that may readily be expanded for any national emergency, including war.

The basic qualifications for enrollment are:

Registration in some state following graduation from a state accredited school of nursing.

State of health consistent with the function the nurse plans to carry.

Personal and professional qualifications consistent with the job she is expected to perform.

Special service requirements for enrollment are:

As a home nursing instructor, an instructor of volunteer nurses' aides and as a disaster nurse, the latter term being defined as "a nurse who has satisfactorily completed a disaster institute or preparedness training course and expresses a willingness to serve when needed, or by satisfactory service in disaster relief operation, either for the emergency or the rehabilitation period."

Serving as a committee member in the local Red Cross Chapter for at least one year.

Serving as a staff member or serving as a nurse leader actively participating in Red Cross work in which the basic philosophy of the Red Cross is interpreted to student and nursing groups.

Participating in Red Cross programs other than nursing.

At the present time a Major Disaster Committee has been established in Hawaii. Our program of Disaster Nursing will be closely coordinated with the Major Disaster Committee on each Island. Due to the fact that it is a Disaster Committee, your Nursing Activities Committee has recommended that nurses interested in becoming members of the Red Cross Nurse Corps become eligible for enrollment by participating in the Disaster Nurse program and institute.

Your Committee will prepare a General Orientation program for a Disaster Nursing Institute and is of the opinion that 12 to 15 hours of intensive lectures, demonstrations and active participation will lead to eligibility in the new enrollment plan. Considerable latitude is permitted to meet local needs. The Hawaii Chapter will act as an area office and an enrollment file will be maintained at the Red Cross office in Honolulu.

We have prepared 500 questionnaires along with pertinent information leading to enrollment in Nurse Corps. The scope of the program will depend to some degree upon the number of nurses who enroll in this much needed program.

Until such time as Nursing Activities Committees are set up on each Island, we are taking the liberty of asking each Association president to assist the Area Office by receiving the questionnaires on her Island. The president may make any recommendations she may see fit and then send the questionnaires to Mrs. Thompson at the Hawaii Chapter office.

In order that the success of this program may be realized in Hawaii we need the interest and help of every nurse who is able to meet the basic qualifications. Those of us who were in Hawaii during the months following December 7, 1941 keenly appreciate the value of a well organized Red Cross Nurse Corps in time of disaster, and active participation in Red Cross work in peace time is equally important. Your Committee will be grateful for your assistance and cooperation.

ELAINE JOHNSON, R.N.

DEAN KELLER

Arthur R. Keller, who was voted an honorary member of the Nurses' Association, Territory of Hawaii, at the 1948 annual meeting, is the second honorary member of our Association. Dr. James Morgan became our first honorary member in recognition of his work on behalf of nursing.

Dean Keller, now retired from his position at the University of Hawaii, has been instructor and Dean of the School of Applied Science and Vice President of the University of Hawaii since 1909. In all of these capacities he has been actively interested in developing opportunities for nursing education at the University. It was through his efforts and under his guidance that the first pre-nursing program connected with Queen's Hospital was started in 1928.

Since that time he has interpreted nursing education to the University administration, made it possible for new programs to develop and has served on the Board of Trustees of the Queen's Hospital where he has been most interested in the activities for preparing nurses. Since his retirement he has kept abreast of developments in nursing education.

We believe that Dean Keller is largely responsible for the development of the nurses' education program at the University, which now includes several degree curriculums for nurses. His ability to remember each student and her individual problems and his continuing interest in each student later on has made him well known and appreciated by all the nurses who have taken work at the University.

THE FIRST CLASS OF PRACTICAL NURSE TRAINING SCHOOL GRADUATES

The first graduation of the Practical Nurse Training School was held in the Mabel Smyth Memorial Building on Monday evening, August 9.

The graduating class of 18 students, wearing the school cap for the first time as a part of the uniform, were awarded pins by Mrs. Marjorie Elliott, Instructor in charge of the course. The diplomas were presented by Mr. William H. Coulter, Deputy Superintendent of Vocational Education.

Mrs. Thomas L. Gage, representing the Nurses' Association, Territory of Hawaii, welcomed the graduating group into the nursing field.

The address of the evening was given by Dr. R. G. Nebelung, Executive Secretary of the Public Health Committee of the Chamber of Commerce.

A reception was held in the Alice Yates room following the exercises. Mrs. Gardner Black, Mrs. Thomas Gage, Mrs. John Martelon and Miss Laura Draper, members of the Advisory Committee for the Practical Nursing School, assisted at the refreshment table.

The graduates have completed a 10-month course of training including 9 weeks of theory and practice in the classroom followed by 30 weeks of hospital and home nursing experience under the supervision of professional nurses.

Diplomas were presented to: Miss Lorraine Abac, Miss Helen Chock, Mrs. Ruth Cushnie, Miss Rosaria Dela Cruz, Miss Rose Ideguchi, Mrs. Ayano Ishikawa, Miss Margaret Lee, Miss Florence Nagata, Miss Michiyo Okihara, Miss Grace Oshiro, Mrs. Margaret Ferreira, Miss Evelyn Shimabukuro, Miss Daisy Shin, Miss Frances Takahashi, Miss Anna Teruya, Miss Norie Uechi, Miss June Yamamoto, Miss Audrey Yoda.

An Alumnae Association of the graduates of the course has been organized. The first and second classes, all of whom will take the Territorial Licensing Board examination this year, are charter members. The officers of the Association are: Margaret Lee, president; Katie Chun, first vice president; Anna Teruya, second vice president; Helen Chock, recording secretary; Charlotte Mente, corresponding secretary; Lillian Oba, treasurer.

QUEEN'S ALUMNAE HONOR '48 GRADUATES

In a tropical setting of ferns and palm trees, the Queen's Hospital Alumnae Association's annual dinner in honor of the graduating class of 1948 of the Queen's Hospital School of Nursing was held in the garden of the Niumalu Hotel on Friday, August 20, 1948. Lighted

torches flanked both sides of the table to add to the tropical atmosphere.

The twenty graduates honored were: Jean Char, Jane Chun, Fumiyo Ebisuzaki, Shirley Hamaguchi, Emma Hee, Itsuyo Kajikawa, Edythe Kamida, Soon Yur Kim, Marjorie Komeiji, Hideko Nishihira, Alice Nishimiya, Florence Ohye, Lillian Suyama, Betsy Takahashi, Lily Tomita, Setsuko Tomita, Mutsue Tomonaga, Betty Yamauchi, Jane Yoshida and Constance Young. Guests present were: Mr. Carl Flath, Administrator of Queen's Hospital, and Mrs. Flath; Miss Mildred McFerren, Director of Nurses at Queen's Hospital; Dr. and Mrs. James Kuninobu, patron and patroness of the class of 1948; and Mrs. Thomas Gage, former advisor of the Alumnae Association. Mistress of ceremonies was Mrs. Mollie Lee.

The highlight of the evening was a fashion show presented by Mrs. Raymond Yap of Joseph Magnin's (Roberta Lind's Shoppe). Featured in the "New Look" show were beautiful negligees, cool sports clothes, tailored suits, chic tea combinations, and enchanting evening gowns. Larry Grant of KPOA was the commentator and Annie Kerr's string trio provided soft Hawaiian music in the background.

NURSING SERVICE TEN YEARS FROM NOW

SISTER MARY ALBERT*

What will be the needs of hospital nursing service ten years from now? This is a question about which it is difficult to make more than a guess. There are many unpredictable factors which will influence this need. However, if Janet Geister had the courage to predict what nursing will be like in 1998, I should be brave enough to hazard some opinion as to what are our needs will be in 1958. Miss Geister remarked in her recent article that in her case the prophet would not be about to eat her words.[1] I'm afraid that I might be in 1958.

In arriving at estimates of professional nurses needed by 1960, the Women's Bureau of the United States Department of Labor based its recommendations on the following current standards in nursing:

1. Existing programs for preparing professional nurses. (In 1946, six percent of entering students planned to take the degree program; ninety-four percent, the diploma program.)
2. Existing requirements for entering the profession. (Ninety-seven percent of schools required a high school diploma; three percent one or more years of college work.)
3. Continued gradual increase in the use of trained practical nurse personnel but no immediate marked change in this respect.
4. A forty-eight hour week in institutional nursing with two weeks' vacation with pay, and a gradual attainment of the 40 hour week in other types of nursing service.
5. Continued increase in the daily average census of patients in hospitals at the rate for civilian hospitals in the period 1941-1945.
6. A high national level of economic activity with relatively full employment.
7. A peacetime Army and Navy.
8. A 1960 population of 153,375,000, as estimated for that year by the Bureau of the Census.[2]

Other factors that will influence the amount and type of nursing care that will be needed in hospitals ten years from now are future advances in medical science and the effect of improved health education programs on the general health standing of our people. It is possible that, with the amount of cancer research and atomic energy study being done along with extensive experimentation in other fields, many of the conditions that require intensified nursing care will be avoided.

It is very true that the discovery of penicillin, streptomycin, and the sulfa drugs has eliminated many of the nursing procedures that were very commonly performed not too many years ago. On the other hand, hospital nursing service is much more complicated today than it was formerly. A greater number of mechanical devices are being used; many more intravenous medications are being given; surgical procedures are becoming more and more delicate; the hospital turnover is becoming increasingly more rapid with a resultant greater load for nursing service. Early ambulation in itself adds to the amount of nursing care needed per patient if psychological as well as physical needs of surgical and obstetrical patients gotten out of bed on the day following surgery or delivery are given proper consideration.[3]

The fact that the straight hour assignment plan is becoming increasingly more prevalent in American hospitals will also necessitate a greater number of nurse hours per patient. A forty-hour week for all hospital employees will increase the number of nurses needed but not the number of nursing hours required per patient. It is interesting to note that in spite of all the advances made by medicine since 1940, the average number of hours of nursing care in twenty-four hours needed at the present time for medical, surgical, obstetric and pediatric patients is not appreciably different from the number of hours required eight years ago. This fact is brought out by a comparison of studies done by the National League of Nursing Education in 1940 and repeated in 1947.[3] The slight increase in time found to be required in 1947 on

* Director, St. Francis Hospital School of Nursing.

Presented at the October 4 meeting of the Nurses' Association, City and County of Honolulu.

[1] Janet M. Geister, "The Hospital and the Nurse," *The Modern Hospital,* August 1948. p. 59.

[2] "Estimates of Professional Nurses Needed in 1960," release from the Women's Bureau, U. S. Department of Labor, November 27, 1947.

[3] Committee on Studies, *A Study of Nursing Service,* New York; the National League of Nursing Education, p. 55.

most services was ascribed in part to the fact that more non-professional workers were employed in 1947. Non-professional workers frequently need professional guidance which slows up their performance and that of the individual who gives the guidance. It was also brought out during the 1947 study that the aide functioned best when she worked with deliberation and without haste.[3]

There was no attempt made in 1940 to determine the proportion of nursing care that could safely be entrusted to the non-professional worker; relationships established at this time were between graduate and student professional nurses. However, in 1947 the Committee on Studies of the National League of Nursing Education included in their research the problem of determining the proportion of nursing care hours that could be given by non-professional nurses. The median percentages of nursing care found to be satisfactorily given by non-professional workers at this time varied from 20 to 35 per cent, depending upon the type of services in which the latter were utilized. The 1947 study does not give any indication of the proportion of total needed hours students should properly provide. It was felt that, because of the "profound changes" taking place in the staffing of hospital nursing services and the current critical scrutiny of programs in schools of nursing, this question should be left open.[3] For the purposes of the 1947 study, the number of hours actually given at that time by student nurses was alone considered.

Assuming that the nursing needs per patient do not change to any greater extent between 1948 and 1960 than they did between 1940 and 1947, the following estimate of personnel needed to staff a surgical department with a daily average of 30 women patients may be made. Further assumptions are:

1) that all personnel work a 40 hour week (8 hours a day, five days a week). Students average ten hours of class a week; therefore, they have thirty hours of clinical experience each week during the periods in which they are assigned to the wards. (On duty six hours a day, five days a week.)
2) 70% of nursing care is given by professional workers.
3) 30% of the professional care given is provided by student nurses.*
4) Nursing aides if employed in place of practical nurses are not to be moved from department to department.
5) Nursing teams consist of one graduate nurse and two aides caring for 16 patients; or one senior student and one aide caring for eight patients.
6) Nursing care hours needed in 24 hours per patient are as listed in table 23 of the 1947 *Study of Nursing Service.*
7) Aides perform the duties performed by aides in the majority of hospitals surveyed in the 1947 study.

Personnel needed to staff a surgical department with an average census of 30 women:

1 supervisor (half of her time will be devoted to this department)
1 head nurse
1 assistant head nurse
9 professional graduates
5 professional students
6 non-professional nurses
1 ward clerk
2 cleaning maids

It is fairly simple to apply these norms to a particular situation in order to determine the number and the type of personnel needed. The difficulty lies in coming to a common agreement as to what type of preparation each group should have. There seems to be the greatest difference of opinion regarding the preparation of the professional nurse.

In the 1947 League study previously quoted, individuals giving direct nursing care to patients are defined as follows:

Professional nurse—graduate of a professional school of nursing;
Professional student—student in a professional school of nursing;
Trained practical nurse—graduate of a school of practical nursing offering a course of at least nine months and approved by the legally authorized state-accrediting agency of the state in which the school is located or by the National Association for Practical Nurse Education;
Practical nurse student—student in an approved school of practical nursing;
Nursing aide—a worker trained on the job and usually given some organized instruction.[3]

Just what are professional schools of Nursing? Is nursing really a profession? And if it is, are all nurses professional women? Dr. Abraham Flexner set up six criteria for determining whether or not a certain type of service is of professional nature. The characteristics that he considers essential are:

1. Professions involve essentially intellectual operations with large individual responsibility.
2. They derive their raw material from science and learning.
3. This material they work up to a practical and definite end.
4. They possess an educationally communicable technique.
5. They tend to self organization.
6. They are becoming increasingly altruistic in motivation.[4]

* This is not the recommended percentage but the percentage of care actually given by students in the hospitals studied in 1947.

[4] Abraham Flexner, "Is Social Work a Profession?" *Studies in Social Work.* The New York School of Philanthropy, No. 4, p. 10 (1915).

In the September 1948 issue of the *American Journal of Nursing,* our beloved Lavinia L. Dock assures us that pioneers in the nursing field considered themselves professional women; she adds that they considered the words "profession" and "vocation" as being synonymous. We have been indiscriminately calling every individual who meets requirements for state licensure a professional nurse for many years. Many laymen, however, have disagreed with us on this issue. The Bixlers questioned our ability to meet the six criteria without reservation.[5] Civil service classifications have listed nurses as semi-professional. It took nurses many years to obtain full rank in the Armed Forces. Many general educators are of the opinion that nursing courses and nursing students are necessarily of inferior quality. Scientists tell us that we do not carry out research in nursing. It is also said that we have no vast body of literature which we can call our own. We are criticized for having educated students by the apprenticeship method. There is hardly one of us who does not know of some unfortunate individuals whom we would not classify as professional nurses even though they have passed their State Board examinations.

Dr. Lucile Esther Brown, who was the director of a comprehensive school of nursing study recently completed, feels that nursing can very definitely be called a profession in light of the Flexner criteria. She adds, however, that not all individuals engaged in nursing are necessarily professional. I would like to suggest that all of you read the two publications printed as a result of the School Study.

One is: *A Thousand Think Together,* published by the National Nursing Council, New York City, 1948. The second was written by Dr. Brown and is entitled: *Nursing for the Future.* It is published by the Russel Sage Foundation, New York, 1948. Both contain very important implications for your future and the future of nursing.

Present day dissatisfaction and self examination are not limited to nursing. Many other professions are going through a like period of introspection. Nor is this self-analysis new to the nursing profession. Back in 1923, Josephine Goldmark directed an excellent survey of nursing and nursing education. As far back as that, she advocated the use of practical nurses. In 1926, the Grading Committee began an intensive study of schools of nursing in the United States. Many very undesirable situations were brought to light at this time. In 1932, a survey was made by Dr. Wier in Canada. Incidentally, Dr. Wier included actors, lawyers, secretaries, teachers, nurses, etc. in professional status. Much good was accomplished by these surveys even though their recommendations were not well implemented at the time.

Since those days remarkable progress has been made in nursing education. However, as far as I can discover, there is no consensus of opinion among nurse educators as to what is the best educational curriculum for the preparation of the professional nurse. Extensive experimentation has been carried on along these lines. One director of research spent years reorganizing the entire body of subject-matter in the basic nursing curriculum along functional units only to discover that he could find no teachers prepared to teach the courses he had set up! There is no doubt that the three-year curriculum needs to be enriched. The majority of nurse educators seem to be of the opinion that the student should have one or two years of college before admission to the school of nursing although others state that a student gains more by taking college work as a graduate nurse. Most combined programs merely prepare the graduate to do better bedside nursing. She needs further preparation and experience for teaching or administration. There is an increasing feeling that both the three-year program and the five-year program might be shortened considerably to the advantage of the student and society.

No matter what type of program is set up, it is well accepted today that: 1) the professional nurse should be prepared to meet the emotional, mental, psychological, spiritual, cultural and social needs of the patient and his family as well as their physical needs; 2) she should be prepared to function in the community as well as in institutions; 3) she should be able to teach individuals how to get well and how to stay well; and 4) she should be able to participate intelligently in organized programs for disease prevention and health maintenance throughout the community. One of the greatest needs in nursing at the present time is nursing specialists. However, any field which is made up predominantly of women is going to have difficulty maintaining stability along these lines.

What will be the future of nursing? It lies in our hands under God. It is up to us to examine our present situation critically, to carry on painstaking experimentation, and to proceed cautiously

[5] G. K. and R. W. Bixler, "The Professional Status of Nursing," *The American Journal of Nursing,* September 1945, p. 730.

without stagnation but with a realization that change is not always progress. We must consider at all times what is best for the patient, society, the individual nurse, and the nursing profession. We must work toward the highest standards possible but it is imperative that they be consistent with the welfare of all concerned.

In our efforts to improve our educational standards, we must not forget that the primary purpose of nursing is service to others. Nursing is a vocation as well as a profession.

Discussion

ARLENE N. THOMPSON, R.N.*

Ten years from now, I hope that Sister Mary Albert, Miss Ho, Mr. Bradfield and I may have the privilege of sitting down together again and chatting concerning this evening's program. At this point, as I gaze into the crystal ball, I wish that I might have some of King Solomon's wisdom.

Sister Mary Albert has mentioned, in her paper, the new chemotherapies, mechanical devices, delicate nursing procedures, etc. We are merely babes in arms as we step into the ATOMIC AGE. In a few years we shall look upon present day procedures as we now look at a Model T Ford. Nursing service will continue to carry a heavier load. Nurses will be required to carry out more delicate procedures and have a greater demand on their ability to carry out the emotional and psychological needs of their patients. With all of the new mechanical devices nurses will have to have even greater mechanical ability than at the present time. Those in the teaching field will have to understand even more about these new devices.

If I am correct in the figures stated in Sister's paper, 40 per cent of nursing care will be by professional nurses; 30 per cent professional students; and 30 per cent non-professional workers. With the present day program for the practical nurse, I raise these questions for thought:

Will the care given by the non-professional worker be increased to 40 per cent and the care given by the professional nurse be lowered to 30 per cent?

Will we have to continue training nurses' aides or will we have a larger number of maids, orderlies or porters?

Is nursing really a profession?

As the six essentials were read, did you feel that we had met all of those requirements?

Are our nursing courses inferior in quality?

Have we made improvements in our program?

Do we still have improvements to make?

I feel that our program, like that of many other professions, will change as the times change. We are slowly accumulating literature and some research has been done.

To me the sixth point is extremely important to remember. Let me repeat it, "They are becoming increasingly altruistic in motivation." As we make advancements in bettering our profession, let us not grow away from being altruistic in our motives. We cannot afford to permit ourselves to be led into doing things that other groups have done. Are the strikers today thinking of others?

We have been criticized for having educated students by the apprenticeship method. May we pause here for a moment . . . to more or less of a degree have not other professions used this method?

Doctors serve a term of internship and residency

Teachers practice teaching

Engineers have a summer program for students on the job

Social workers train in field work under supervision

Chemists spend long hours in the laboratory learning how to find the unknown.

Is there some other method that we as nurses can use?

We are asking to be recognized as professional women. As stated, we must be prepared mentally, culturally, spiritually, and socially. We must continue to improve our educational background. We will have to take a greater interest and responsibility in community organizations and projects. We will have to leave our cloistered group and broaden our horizons. Nurses *must* realize some of their responsibilities to their profession—stability in a position; responsibility in keeping a contract to whch she has signed her name; participation in the organizations of her profession. *You and I as nurses and members of this profession are the only ones who can accomplish this for ourselves.*

We are starting on a program of economic security. The distance that we cover depends on you and me. In ten years perhaps we shall have a retirement program; social security; not more than a forty-four hour week for institutional nurses; not less than three or four weeks' vacation; leaves of absence for short periods of advanced study; professional standing in civil service; subsidization for student nurses in a university program.

If in the next ten years we find ourselves in a depression, the stable, well-educated nurse will be the busy nurse, or, if we are in another war, or post-war period, the good bedside nurse and the well-educated nurse will again have better opportunities for advancement. I hope in this period of time some recognition may be given to the nurse who is giving and continues to give excellent bedside care. Our profession needs them.

In accomplishing our goals, let us keep in mind Sister Mary Albert's closing thought, "We must not forget that the primary purpose of nursing is service to others."

* Director of Nursing, Children's Hospital.

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NATIONAL NURSING COUNCIL, INC., announces the publication of *Nursing for the Future* by Esther Lucile Brown, Ph.D. This is a report of the study of schools and programs in nursing education which has just been completed by Dr. Brown. This study, made at the request of the National Nursing Council was financed primarily by the Carnegie Corporation. The Russell Sage Foundation loaned Dr. Brown to be director of the study and has also published the full report. In content the report deals principally with nursing education but also with nursing service in so far as there are implications for education.

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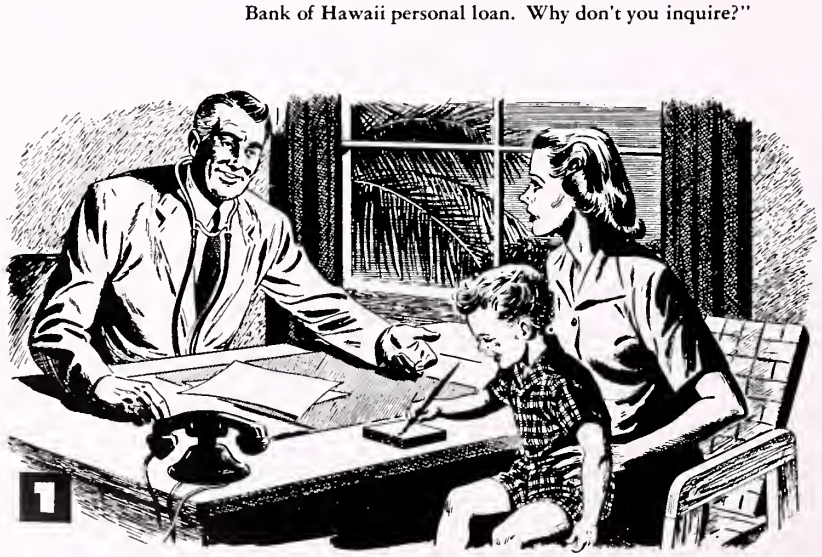
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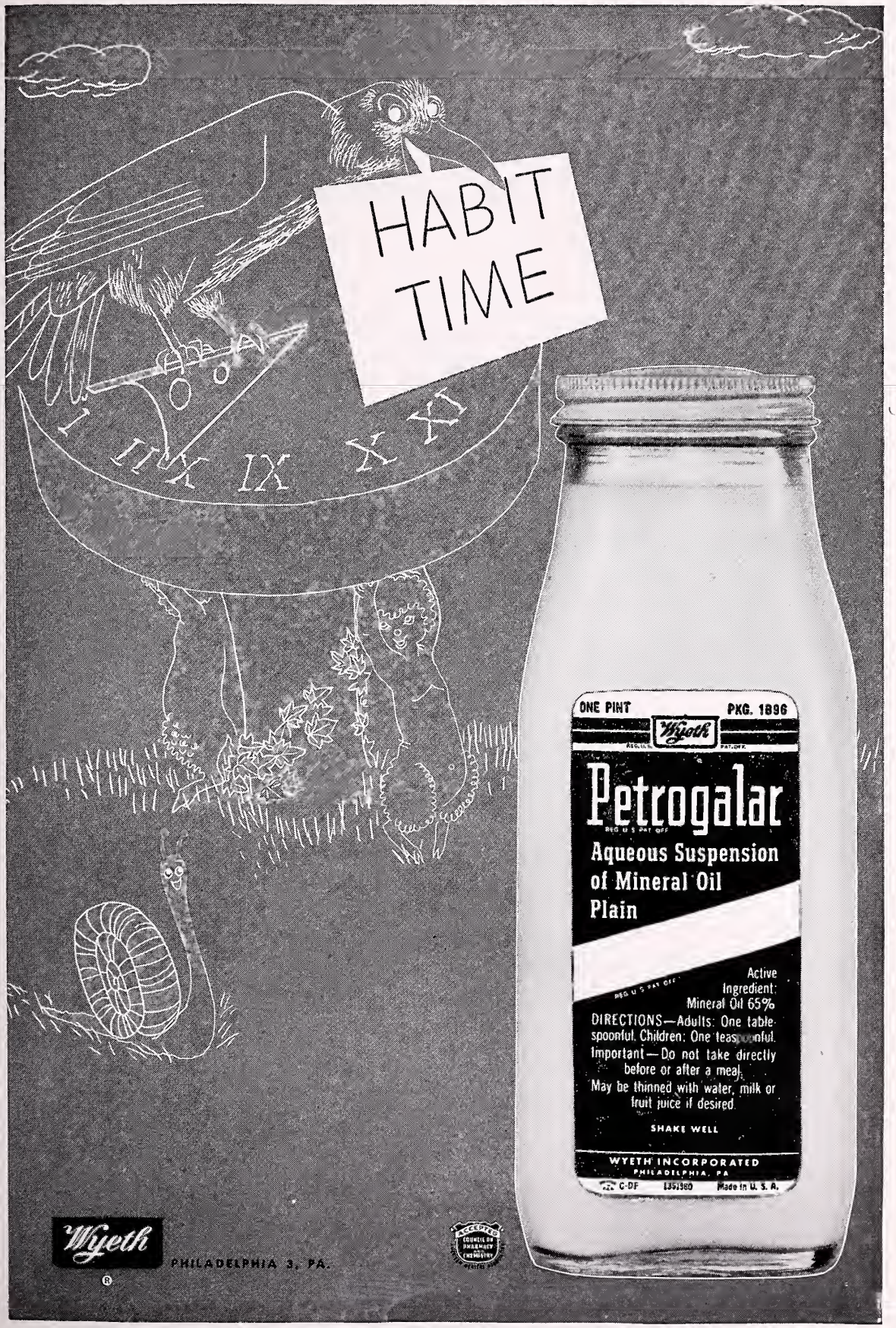
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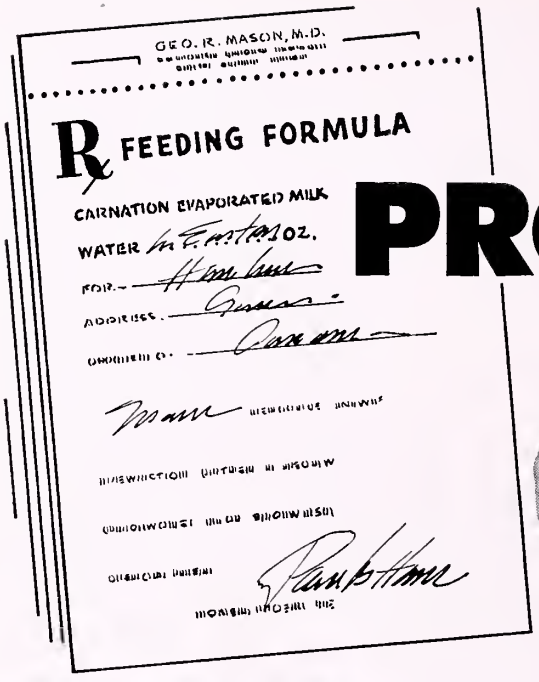
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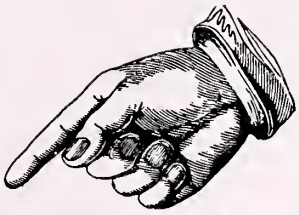
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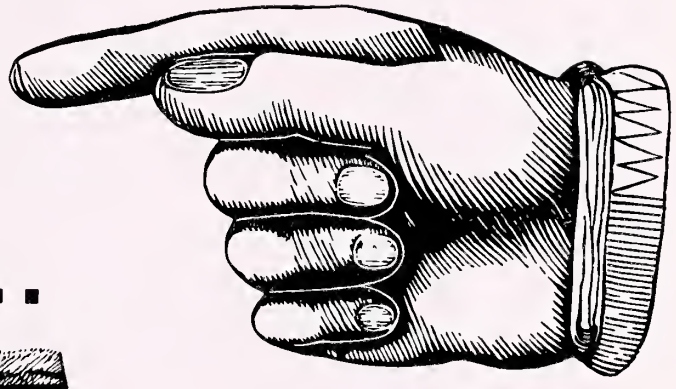
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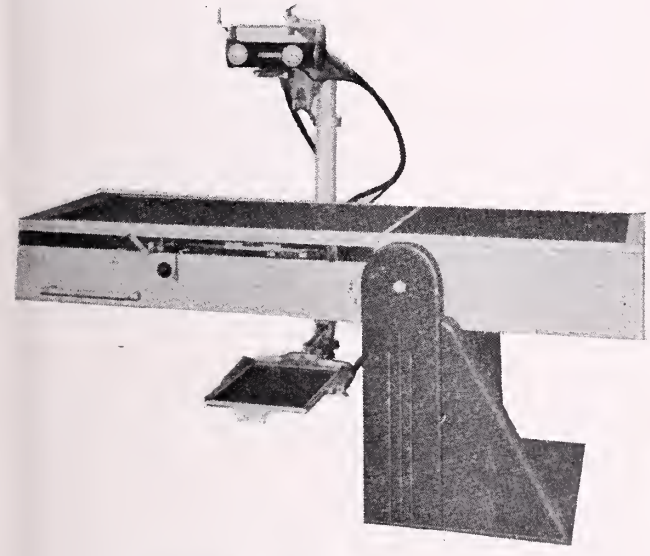
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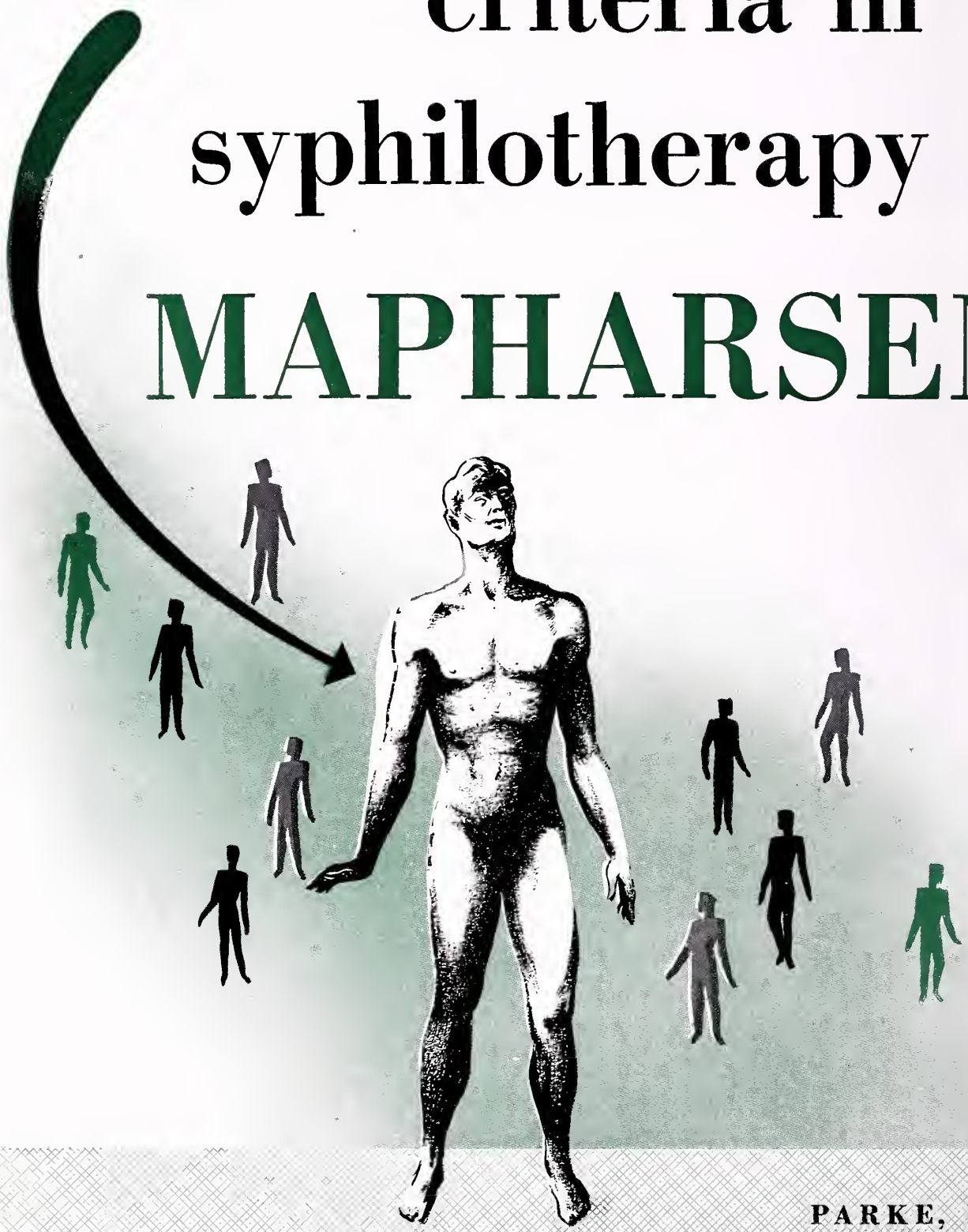
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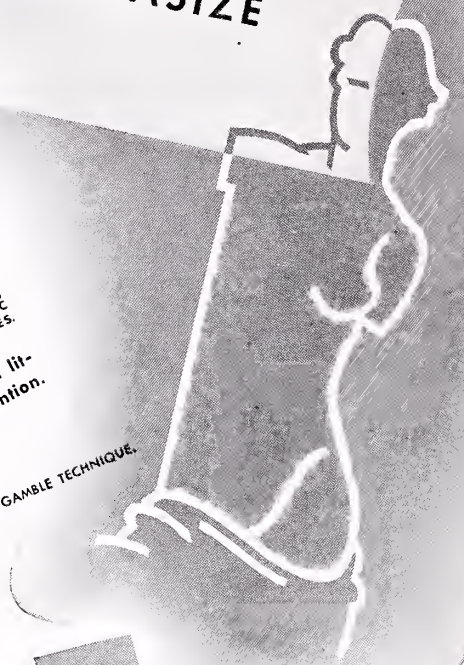
*Cecil, R. A.: A Textbook of Medicine. Philadelphia, W. B. Saunders Co., 1947, p. 376.

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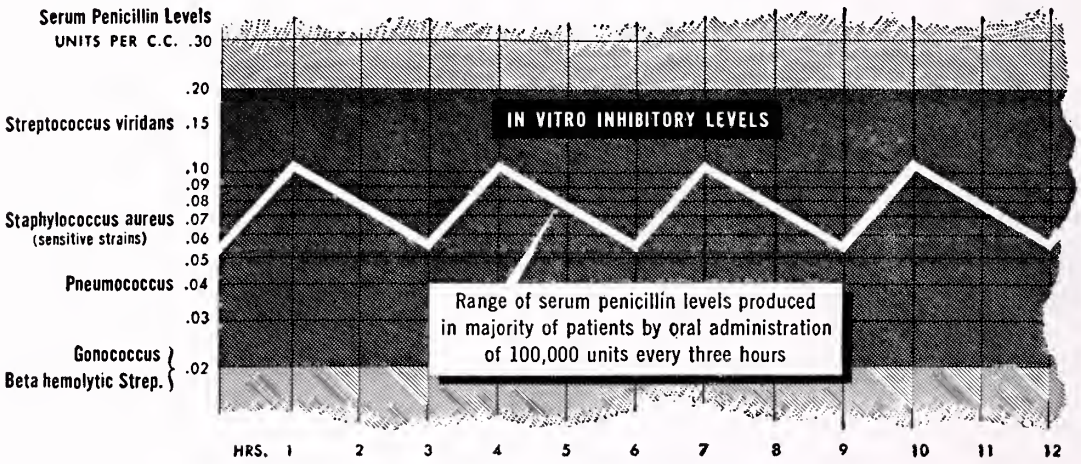
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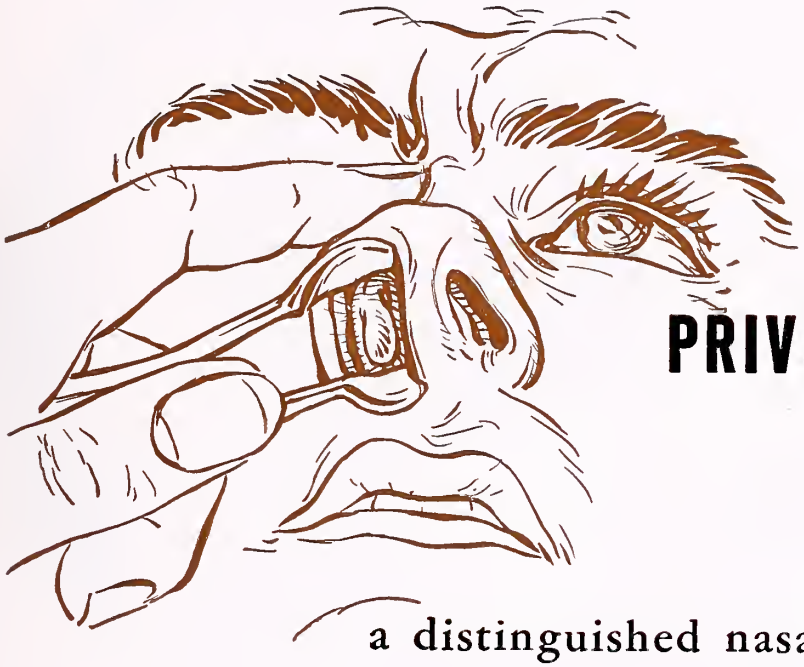
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[1] Boss, E.P.: The Physiologic and Clinical Phenomena of Aging, New Orleans M. & S. J. 97:64 (Aug.) 1944.

[2] Spies, T.D., and Collins, H.S.: Observation on Aging in Nutritionally Deficient Persons, J. Gerontol. *1*:33 (Jan.) 1946.

[3] Stieglitz, E.J.: Therapy of the Aged, M. Ann. District of Columbia *17*:197 (Apr.) 1948.

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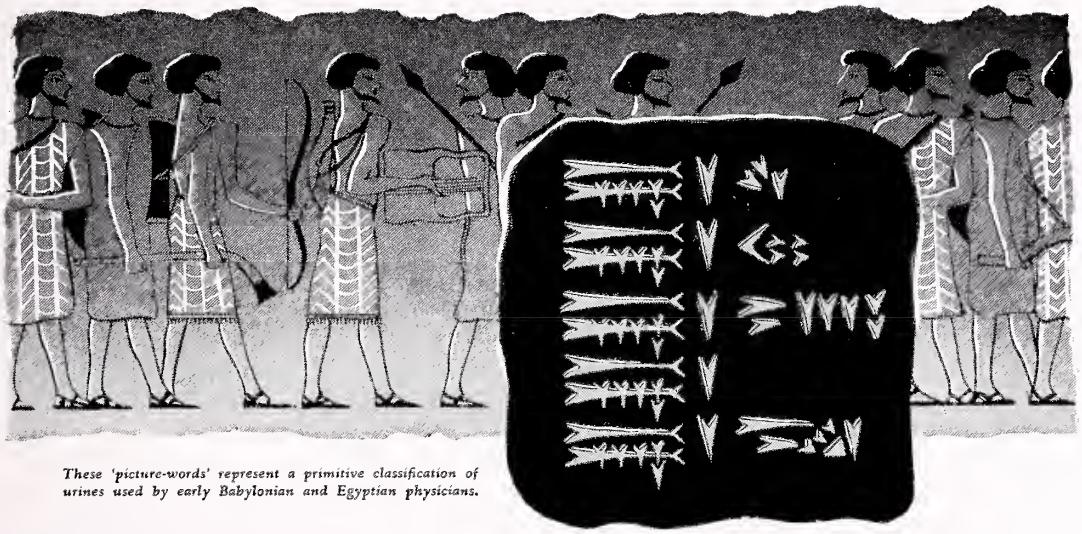
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*Beams, A. J., and Endicott, E. T., Histologic changes in the livers of patients with cirrhosis treated with methionine, Gastroenterology 9:718-735 (Dec.) 1947.

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Five Years of Heart Disease in Hawaii

MORTON E. BERK, M.D., and ALFRED S. HARTWELL, M.D.
HONOLULU

THOMAS SYDENHAM [1] in his "Description of Diseases" states: "In writing, therefore, a history of diseases, every philosophical hypothesis which has prepossessed the writer in its favour, ought to be totally laid aside, and then the manifest and natural phenomena of diseases, however minute, must be noted with the utmost accuracy, imitating in this the great exactness of painters, who, in their pictures, copy the smallest spots or moles in the originals."

In an effort to ascertain the importance of the various types of heart disease in Hawaii, it was decided to study the hospital admissions of all cases of heart disease over a five-year period. We fully realize that such a study is inadequate because many cardiac cases are not admitted to hospitals, and hospital admissions are not sufficient indication of the prevalence or incidence of certain types of heart disease in the Territory, such as those due to rheumatic fever. This study was done in four Honolulu civilian hospitals and includes cases admitted from January 1, 1942 to December 31, 1946, inclusive. It was our particular desire to determine the importance of rheumatic fever and rheumatic heart disease as a hospital problem in Honolulu, as it has been our impression that the attention paid to this group in the past has been negligible. A preliminary study of heart disease in an outpatient department has previously been reported.[2] Prior to the outpatient clinic report, only two definite references to rheumatic heart disease in Hawaii had been made. The first [3] was made by Dr. Henry C. Gotshalk at a clinical pathological conference of The Queen's Hospital in 1938, at which time he described a case of acute rheumatic carditis and bacterial endocarditis with Aschoff nodules found at autopsy. The second was a case reported by Drs. Doolittle and Tilden in 1941.[4] Interestingly enough, a third reference [5] to probable rheumatic heart disease was found in the 1904 transactions of the Territorial Medical Society. Here mention is made of a case of "Articular Rheumatism with Endocarditis" which was presented at The Queen's Hospital.

Method of Study

The records were obtained from The Queen's Hospital, St. Francis Hospital, Kuakini Hospital, and Kauikeolani Children's Hospital. Cases chosen were those in which there was no doubt of the diagnosis of heart disease. This of necessity meant discarding numerous records. Approximately 65 per cent of the charts reviewed contained insufficient data for adequate diagnosis and were therefore not used. In the cases accepted the following criteria were utilized singly or in combination: 1. A clear-cut history and physical examination by a competent physician. 2. Roentgenographic proof of heart disease. 3. Electrocardiograms consistent with the clinical diagnosis. 4. Examination of necropsy material.

For the study of rheumatic fever and rheumatic heart disease, the following data were noted: Age, sex, race, electrocardiograms, roentgenograms, total number of hospital admissions, total number of hospital days, number of hospital days per patient and the summary of the important necropsy material. Considerable detail regarding the clinical picture and cardiac lesions will be reported elsewhere.

For the syphilitic, congenital, and hypertensive cardiovascular disease groups, we noted the age, sex, race, clinical picture, electrocardiograms, roentgenograms, number of hospital admissions and number of hospital days. In the large number of patients that had arteriosclerotic heart disease with or without hypertension, a detailed analysis was not done, as this was considered beyond the scope of our study. A small group of patients with miscellaneous diseases of the heart was tabulated. The racial distribution was compared to the normal racial distribution in the Territory.

Material

The population of the Territory of Hawaii in 1944 was 492,379. The racial distribution is given in Table 1. The total number of cases studied was 1,269. These patients stayed in the hospital 32,795 days and comprised 1,826 admissions. The number of patients, hospital days, and hospital admissions of the different etiological groups of heart disease is shown in Table 2.

Read before the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 7, 1948.

[1] Sydenham, T.: The Entire Works of Thomas Sydenham, 4th Edition, translated by John Swan, M.D. R. Cave, London, 1763.
[2] Hartwell, A. S. and Lam, J.: Heart Diseases in Hawaii; HAWAII M. J. 3:71 (Nov.-Dec.), 1943.
[3] Gotshalk, H.: Personal communication.
[4] Doolittle, S. E., and Tilden, I. L.: Rheumatic Heart Disease in Hawaii; HAWAII M. J. 1:7 (Sept.), 1941.
[5] Transactions of Thirteenth Annual Meeting of Hawaiian Territorial Medical Society, 1904.

Total Admissions, Patients and Days. The important fact in this table (Table 2) concerns the rheumatic group. This is the only one of the groups in which the number of hospital days is large in proportion to the total number of patients and admissions. It is evident that rheumatics required longer hospitalization per patient admission than patients with other types of heart disease.

Korean	6,970	1.1%
Porto Rican	8,932	1.4%
Hawaiian	11,802	2.4%
Chinese	29,813	6.2%
Filipino	47,863	9.8%
Mixed	60,047	12.4%
Caucasian	162,864	33.2%
Japanese	164,268	33.5%

TABLE 1.—*Population by racial groups, Territory of Hawaii, 1944.*

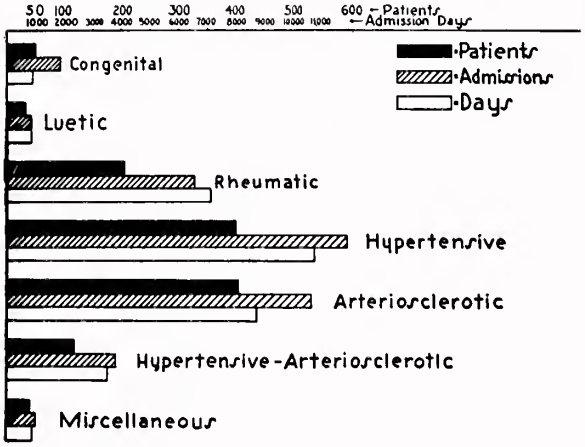


TABLE 2.—*Total number of patients with heart disease, admissions for heart disease, and days in the hospital for heart disease, for each etiologic type of cardiac disorder in Hawaii.*

Rheumatic Disease by Age Groups. Table 3 shows the ages of 218 rheumatics in five-year groups. The number of deaths in each group is indicated in black. The larger number in younger age groups is consistent with figures reported elsewhere.[6] As anticipated, 129, or 59 per cent, were females.

Racial Incidence of Rheumatic Disease. The racial incidence of rheumatic disease is illustrated in Table 4. The larger number in the Puerto Rican, Hawaiian and especially in the Mixed groups, in proportion to the total population, is obvious. Eighty-two per cent of the Mixed group were Part-Hawaiian. It is significant that almost 1 out of every 4 patients with rheumatic fever or rheumatic heart disease, admitted to one of the four hospitals in this five year period, died.

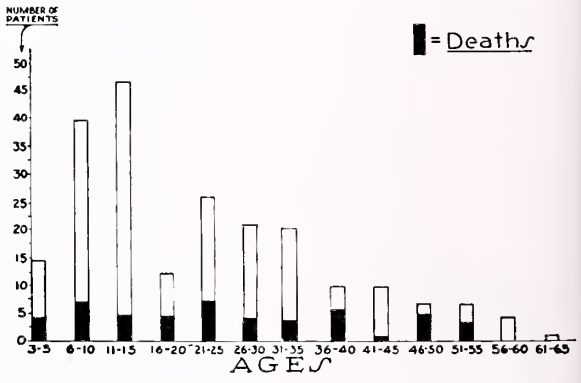


TABLE 3.—*Age distribution of incidence and deaths, rheumatic fever and rheumatic heart disease in Hawaii.*

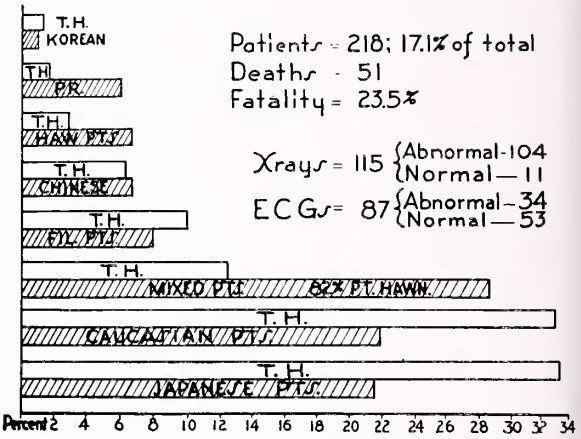


TABLE 4.—*Racial distribution of cases of rheumatic heart disease in Hawaii compared with racial distribution of the general population.*

The larger proportion of Puerto Ricans, Hawaiians and patients of Mixed ancestry in comparison to the population percentages of the Territory as a whole is obvious.

Congenital Heart Disease. This chart (Table 5) shows the racial percentage of the 47 patients with congenital heart disease which we studied. It was of interest to us to note that the incidence was highest in the Mixed ancestry group when compared on a percentage basis with other population groups.

Racial Incidence in Hypertensive Cardiovascular Disease. The racial incidence of 409 cases of hypertensive cardiovascular disease is illustrated in

[6] Hedley, O. F.: Heart Disease in Philadelphia Cardiac Clinics; U.S. Public Health Bulletin No. 268, 1941, p. 13.

Table 6. The increased occurrence in Hawaiian, Chinese and Caucasian groups should be noted. The low incidence in Filipinos and Japanese is also of interest. The fatality of the hypertensive group was 30.5 per cent.

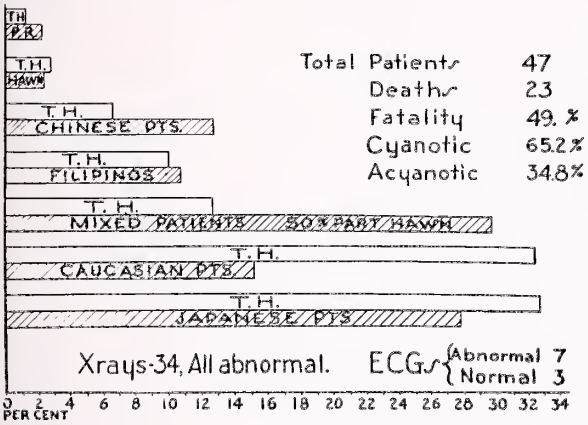


TABLE 5.—*Racial percentage of patients with congenital heart disease.*

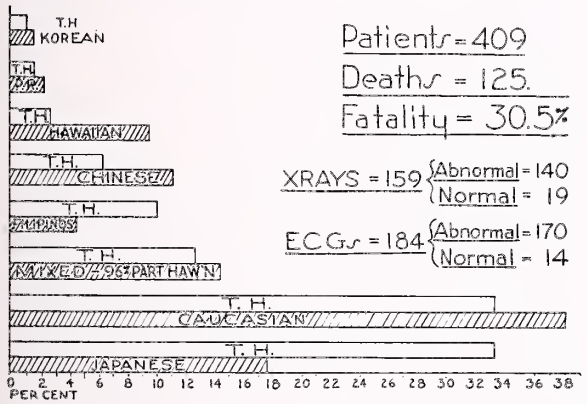


TABLE 6.—*Racial distribution of cases of hypertensive cardiovascular disease compared with racial distribution of the general population.*

Degenerative Heart Diseases. The age incidence by decades of patients with degenerative heart disease is graphically shown in Table 7. The figures are what one would expect. The fatality was 33.3 per cent.

Syphilitic Heart Disease. The racial incidence by percentage of 29 patients with syphilitic heart disease is indicated in Table 8. The high incidence in Hawaiians as contrasted to their population percentage in the Territory is startling!

Miscellaneous Heart Diseases. Thirty-eight patients with miscellaneous cardiac diagnoses are shown in Table 9. Three cases are of particular interest. One patient developed acute pericarditis shortly after thiouracil therapy for severe thyrotoxicosis had been instituted. This complication had been previously reported.[7] The other two cases were patients operated on for chronic constrictive pericarditis. Both recovered.

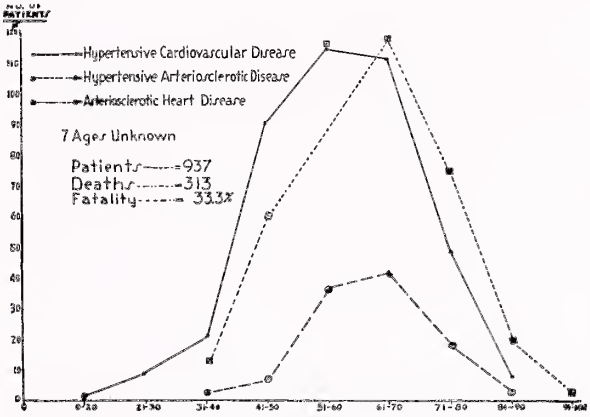


TABLE 7.—*Age group distribution of degenerative heart disease in Hawaii.*

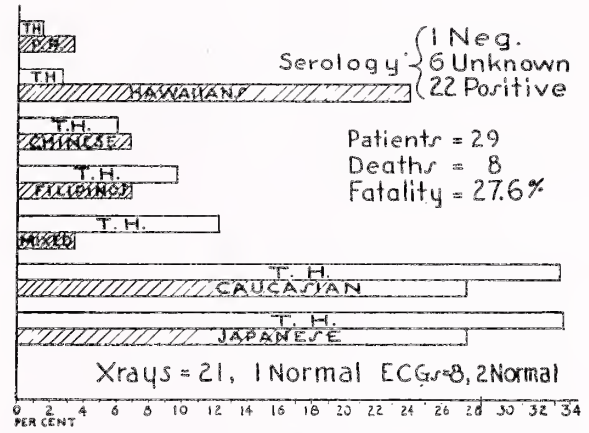


TABLE 8.—*Racial distribution of syphilitic heart disease in Hawaii compared with racial distribution of the general population.*

Discussion

The incidence and prevalence of heart disease as defined by Dublin [8] is not indicated here, but an idea of the importance of these cardiac diseases in the hospital admissions in the Territory of Hawaii is presented. We have calculated the percentage of admissions by races and found them to be approximately the same as the population percentages for the Territory shown in Table 1.[9]

It was discouraging to find such a wealth of clinical material with inadequate data. At least 65 per cent of the records reviewed were discarded for this reason. For example, in 538 consecutive

[7] Curtis Bain, C. W.: Pericarditis and Complete Heart Block during Thiouracil Therapy; Brit. Heart Jour. 7:1 (Jan.), 1945.

[8] Paul, John R.: Epidemiology of Rheumatic Fever; Metropolitan Life Insurance Company, 2nd Edition, 1943, pp. 129, 136.

[9] Figures on racial admissions were only available for two years from two hospitals. They were by percentage Caucasian 40.9, Japanese 33.5, Hawaiian and Mixed (combined) 12.0, Chinese 6.2, Filipino 6.0, Korean 1.6 and Puerto Rican 0.8.

charts studied, only one hundred and ninety included sufficient information to justify the discharge diagnosis.

TABLE 9.—*Miscellaneous varieties of heart disease encountered in the series.*

Arrhythmias alone	
Auricular tachycardia	5
Auricular fibrillation	8
Nodal tachycardia	2
Ventricular tachycardia	1
Infections	
Subacute bacterial endocarditis	2
Purulent myocarditis	1
Diphtherial myocarditis	1
Staphylococcic pericarditis	1
Metabolic disorders	
Thyrocardiac disease	6
Pericarditis with thiouracil	1
Vitamin deficiency	
Beriberi	1
Miscellaneous	
Chronic constrictive pericarditis with surgical cure	2
Cor pulmonale	3
Calcific aortic stenosis	1
Disseminated lupus erythematosus	1
Uncertain	
Lutembacher's syndrome?	1
Bundle branch block, ?cause	1

Patients—38.
Deaths—9.

The importance of rheumatic fever and rheumatic heart disease as a hospital problem in the Territory of Hawaii may be appreciated when it is realized that patients with these diseases represent 17.1 per cent of these carefully surveyed cardiac cases, and that their fatality rate was 23.5 per cent. It is pertinent that in the one year heart survey conducted in a Honolulu outpatient clinic by Hartwell and Lam,[2] the incidence of rheumatic heart disease was 17.5 per cent. This problem therefore is much the same here as in the southern states.[10] The 218 rheumatic cases were admitted 330 times. This is 0.4 per cent of the 81,949 medical admissions to the four hospitals concerned during the five year period.

It is our firm belief that rheumatic fever and rheumatic heart disease need more attention in this community and that the problems they present should enlist the interest of physicians, hospitals, social agencies and the general populace. The opening of a rheumatic fever ward at the Children's Hospital was a forward step and should receive community support.

It is a sad commentary that in the United States as a whole public interest in various chronic diseases is often inversely proportional to their importance. As Hench *et al.*[11] have so aptly quoted, "The greater the need, the less the public's support." Their statistical tables show that in one year's time there was $94 available for each of 175,000 patients afflicted with poliomyelitis, whereas in the same year only 3 cents was raised for each of 3,700,000 patients with heart disease!

[10] Hench, P. S.; Baner, W.; Boland, E. W.; Crain, D. C.; Freyberg, R. H.; Graham, W.; Holbrook, W. P.; Lockie, L. M.; McEwen, C.; Rosenberg, E. F.; and Stecher, R. M.: Rheumatism and Arthritis: Review of American and English Literature of Recent Years (Ninth Rheumatism Review); Part I; Ann. Int. Med. 32:95 (Jan.), 1948.
[11] Idem: Part II: Ann. Int. Med. 32:309 (Mar.), 1948.

Summary

1. The records of patients with heart disease admitted to 4 Honolulu hospitals during a five year period are reviewed.

2. Of 81,949 medical admissions only 1,269 charts of cardiac patients contained sufficient data to make an accurate cardiac diagnosis. These were analyzed as to etiology, racial incidence, number of admissions, duration of hospital stay, fatality rate and pertinent clinical data.

3. Points of importance concerning racial incidence, age distribution and a break-down of etiologic groups are shown graphically.

4. Patients with rheumatic fever and rheumatic heart disease comprised 17.1 per cent of the total number of cases. The fatality rate in this group was 23.5 per cent.

5. A plea is made for more complete hospital records on cardiac cases, and for increased interest in the problems presented by patients with rheumatic fever and rheumatic heart disease in the hospitals of the Territory of Hawaii.

The Medical Group, 1133 Punchbowl Street
The Clinic, 881 S. Hotel Street

Discussion

DR. HENRY C. GOTSHALK: I would like to congratulate Drs. Berk and Hartwell on their five-year survey of heart disease in the major Honolulu hospitals. This type of basic study makes apparent some of the more essential medical problems of the community. It becomes obvious from this survey that the care of the rheumatic fever and the rheumatic heart patient has been much neglected. Rheumatic fever in Hawaii usually has very mild clinical manifestations, and it is highly probable that only the severe cases are hospitalized. This fact seems to explain the statement that "approximately one out of every four patients with rheumatic fever or rheumatic heart disease in the four hospitals, died."

A comparison of the mortality statistics with other sections of the country gives us some idea of our problem. In the New England states, where the incidence of rheumatic fever is high, the average mortality figure was 22.7 per hundred thousand over the period of 5 years (1941 to 1945). In California, the average mortality figure was 18.2 during the same period. In Texas 8.2 and in Hawaii 7.4 per hundred thousand. Unfortunately, there are no morbidity statistics in Hawaii available for comparison.

Some progress has been made on a program designed to give adequate care to the victims of rheumatic fever. Recently the Board of Health has subsidized a ward at the Children's Hospital for this purpose. It has also made rheumatic fever a reportable disease, in an effort to increase our knowledge of its prevalence here. At this time, little is being done in the way of convalescent and rehabilitation care. It is hoped that the Hawaii Heart Association, now in the processes of being formed, will undertake this problem as one of its first major projects.

Psychodynamic Electrotherapy

A New Psychiatric Modality

J. ROBERT JACOBSON, M.D.

KANEOHE

THE last thirteen years have witnessed a rather remarkable change in the practice of psychiatry, due to the introduction of the shock treatments. In 1935, Von Meduna introduced metrazol therapy. Sakel introduced insulin shock, and Moniz in Portugal introduced lobotomy. Later, electric shock treatment replaced metrazol as the method of inducing convulsive seizures. Sodium amytal and sodium pentothal came in as useful chemical agents for altering brain function so as to make the individual more accessible to psychotherapy. These somatic modalities have brought about a profound change in psychiatric thinking. They have helped to dignify the place of psychiatry in medicine. The psychiatrist can look upon psychiatric phenomena as related to brain function and can aim at brain changes through the use of specific somatic agents. In this way he can bring about significant personality improvements.

The customary course of electric shock treatment consists of 10 to 15 treatments given three times a week. One or two courses constitute the extent of clinical treatment. One felt the need for including appropriate psychotherapy with an adequate psychological approach to go along with the physiological cerebral alteratives. For this reason I have for some time organized the administration of electric shock treatment so that before each treatment the patient knew why he was being treated, and what were the goals of therapy. He was told what was wrong with his behavior and in what way he must change his manner of behaving. The electric shock treatment setting was employed as a powerful environmental force for motivating a return to social orientation. Electroconvulsive therapy was a crude tool for this purpose because the patient became unconscious, had memory loss for the suggestions given him, and developed a relative indifference to the originally unpleasant phases of the treatment.

In 1946, Dr. Liberson presented the Brief Stimulus Apparatus as a superior instrument for administering a convulsive seizure. He claimed that the seizure was less violent, the post-convulsive coma shorter, and the post-convulsive memory loss and disturbance of thinking markedly reduced. I have made use of the greater flexibility of this machine to administer an electric current which resulted in a strongly disagreeable central reaction without any significant impairment of consciousness. This procedure proved to be far superior to electric shock treatment as an agent for enormously increasing environmental pressure so as to alter social motivation.

Technique

A continuous current is administered ranging from 50 to 200 m.a. Various positions of the electrode change the intensity of the central reaction. The least intense results occur when the indifferent electrode is placed over the vertex, the active electrode over the left frontal area. Bifrontal application of both electrodes results in a more intense central reaction and bi-parietal application results in the most intense. Occasionally the subconvulsive administration may spill over into a full grand mal seizure. The current is administered for 3 to 5 seconds and repeated at intervals as often as the therapist deems necessary. Treatments are given twice weekly.

Individuals vary markedly in their reaction to the treatment. Some are excessively sensitive and develop marked panic reactions. At times a delirioid reaction appears in which the individual is hysterically out of contact, rolling his eyes and threshing about. Other patients are relatively insensitive and quite stoical so that the current has to be increased and the electrodes placed at the bi-parietal areas to elicit appropriate central reactions. In the course of the treatment the patients become desensitized and are much more stoical. They describe the central reaction as "hot," "vibrates," "hurts." The writer has experienced the treatment himself and would describe it as a weird overwhelming vibratory reaction which leaves one helpless. There is also the sensation of numerous pin-point burning spots on the scalp.

Before the treatment is given the patient is told that it is going to be disagreeable, unavoidably

From the Territorial Hospital.

Read before the Honolulu County Medical Society, December 3, 1948.

so. The important thing is the patient's ability to meet the experience with the help of the doctor. The patient's cooperation will reduce the discomfort to the minimum and enhance the effectiveness of the therapy. The doctor is sure the patient wants to get well and go home, and the doctor shares this desire. If the patient and doctor work together the treatment will be successful. In order to set a suitable goal it is necessary to know the patient, his life situation and his behavior on the ward. Reports are secured from the nurse, the attendants and the occupational therapist. This information is pooled and some immediate practical goal is then set.

The goal set varies with the type of illness and the pattern of the behavior disturbance. To the anxious depressed patient one points out the parallel between his troubles, the painfulness of his feeling-states of anxiety and depression, and their analogy to the painful physical stimulation. If he can develop an ability to endure more stoically the present painful stimulus, he can also learn to become more stoical toward the painful affective states associated with his personal difficulties.

The indifferent patient is given the goal of becoming more energetic and working harder. The hostile patient is influenced to become more friendly and cooperative. Rigid, withdrawn, unresponsive patients are given the goal of becoming more friendly and responsive. Patients with a tendency to emotional oscillations are given goals of stabilization. Patients who show a tendency toward panic reactions are influenced to develop more courage.

TABLE 1.—*Results of psychodynamic electrotherapy in 161 cases of mental illness.*

DIAGNOSIS	TOTAL NO.	IMPROVEMENT				NO. DISCHARGED
		None	*Slight*	*Moderate*	*Marked*	
Schizophrenic, Chronic	75	9	4	41	21	23
Schizophrenic, Acute, After Electric Shock	27		3	2	22	20
Schizophrenic, Acute, Before Electric Shock	5		1	4		
Manic Depressed, Acute	9			1	8	7
Manic, Chronic	2		1		1	
Involutional Paranoid and Paranoid Condition, Acute	13		1	1	11	9
Involutional Paranoid, Chronic	1				1	1
Senile Paranoid	1	1				
Psychoneurosis	4			1	3	4
Psychosis with Mental Deficiency	3				3	3
Paretic	1				1	
Behavior Disorders, Epileptics	4	1			3	1
Psychopathic Personality	16			1	15	14
Totals	161	11	10	51	89	82

Results

This treatment has proved effective in acute schizophrenics who show *residual personality defects* after customary forms of shock therapy. Convalescence is materially accelerated and the stay at the hospital shortened in such patients. The patient who has remained somewhat rigid, withdrawn and relatively unresponsive shows marked response to therapy. He loosens up, becomes much more friendly and responsive, and shows a better quality of spontaneity and energy in working.

Patients with residual apathy, emotional flattening and a lack of energy, become noticeably more alert, more energetic and more brisk. No doubt one of the factors that motivates the patient to become more energetic is the fear of the unpleasant form of treatment; but there appears to be in addition a physiological effect, presumably from stimulation of the sympathetic nervous system. Patients repeatedly state that they feel better, have more energy and can think better.

Patients with residual rigidity and hostility respond well to this form of treatment. The hostility disappears and in its place an attachment to the doctor, the nurse and the attendants develops. The friendliness of patients who have been treated with the psychodynamic modality is one of the prominent features of the treatment results.

A number of *chronic schizophrenics* who had failed to respond to all forms of shock treatment responded markedly to this therapy. As will be seen from the chart, 21 out of 75 such cases showed marked improvement and 41 showed moderate improvement. Twenty-three discharged.

In *acute schizophrenics* whose illness had lasted less than two years, 22 out of 27 showed marked improvement and 20 were discharged. In *manic depressive psychosis* the psychodynamic modality has value in those cases where residual personality defects continue after the customary electric shock treatment has been given. Eight out of 9 cases treated showed marked improvement and 7 were discharged. One striking response was secured in a *chronic manic* who had had extensive shock treatment and lobotomy. She was in an extreme state of emaciation, but quieted down, gained five pounds the first week and is now preconvalescent.

This therapy has been strikingly effective in the *involutional paranoid* and in *paranoid conditions* where orthodox shock treatment is so ineffectual. In 14 cases treated 12 showed marked improvement, 10 are out of the hospital. This therapy has proved almost specific for the antisocial attitude of the *psychopathic personality*. Repeatedly the aggressive, uncooperative attitude of the hostile psychopath has been modified and a friendly, cooperative, pleasant attitude secured. There is no

claim that the essential criminal tendencies have been altered. In most cases these patients were returned to prison or the training schools.

One case is of especial interest. This boy was sent from the training school to the Territorial Hospital with an acute psychosis which responded to shock therapy. He remained, however, aggressive, uncooperative, and irresponsible. He had never learned to read or write. The psychodynamic electrical stimulation was employed to test experimentally the writer's observation from his work in the elementary schools that the primary basis of poor school learning is warped social orientation and motivation. This fifteen-year-old boy was taught by the nurse, with the electrical stimulation furnishing a strong biological reenforcement of the boy's poor motivation to learn. He became careful and reflective in the language situation, and slowly but surely began to learn to read, write and spell.

It is my opinion that the effectiveness of this therapy does emphasize the powerful effect of appropriate environmental stimulation on brain function. When this boy was motivated to be careful, to make an adequate effort, to become proud of achievement and chagrined at failure, he began to reflect and learn. More important than his achievement in the two R's, the fundamental basis of his psychopathic traits was being influenced. He was becoming careful of consequences, and responsible, and was incorporating constructive social goals.

This form of therapy is seemingly specific for the behavior disorder of the *mental defective* with aggressiveness, uncooperativeness and wilfulness. Three such cases showed marked improvement and were discharged. Two cases of *hysterical fugue* responded promptly to a short period of treatment. This suggests possible therapy of hysterical amnesia, hemiplegia, blindness, etc. All four of the *psychoneurotics* treated responded to treatment and were discharged. Fourteen *alcoholics* were given a short course of electric shock treatment followed by psychodynamic electrotherapy. We have information in 9 cases. Six out of the 9 have not returned to use of alcohol for 1 to 2 months. The others have.

Exclusive of the alcoholics, in a total of 161 patients treated since May, 1948, a total of 140 showed moderate to marked improvement and 82 of these have been discharged.

Comments and Summary

This form of therapy does create a situation where constructive suggestion becomes powerfully effective in altering the orientation of the patient toward society. The doctor becomes an authoritative figure whose guidance and support bring back contact with the environment in patients who at the beginning of treatment were completely out of contact. It is most effective where other forms of shock treatment have been previously employed. The purely somatic modality appears to facilitate the responsiveness to the psychodynamic modality. I regard the *person* as a functioning organ which represents the focus of cortical function. Personal orientation to society determines the pattern of brain function and any change in social orientation profoundly alters the pattern of behavior. The disagreeable central reaction breaks up the patient's defensive withdrawal from the environment and makes him susceptible to constructive suggestion.

Patient delineation of a personal goal is essential to successful therapy. The relative ease with which apparently malignant psychotic patterns are altered indicate that the bizarre delusions and other abnormal mental phenomena are secondary to the malignant social orientation. Psychodynamic electrotherapy has proved effective in altering that social orientation and thus materially modifying the psychotic patterns.

Since the inauguration of this therapy in May, 1948, psychiatric practice at the Territorial Hospital has been revolutionized. We now think psycho-physiologically of treatment possibilities for the patient. We utilize electro-convulsive and insulin shock treatments as primarily physiological cerebral alteratives and then employ psychodynamic electro-therapy as an added primarily psychotherapeutic modality which adds materially to the total success in treatment.

Fatal Renal Failure Following Transfusion of Compatible Blood and Excessive Intravenous Administration of Fluids

M. GERUNDO, M.D.
HONOLULU

IT IS common belief among general practitioners that a blood transfusion, if it does no good, at least does no harm. That this view is not correct is demonstrated by numerous reports in the literature which clearly point that under certain circumstances, a transfusion of compatible blood may lead to disastrous consequences for the patient. It is true, however, that the number of such complications is small when compared to the total number of transfusions given, and that with the exercise of a little care, it may become still smaller.

I have had the opportunity to study within a very short period of time four cases, all of which showed some albumin in the urine before transfusion, and in which, following blood transfusion, there developed such alarming symptoms as drowsiness, mental confusion, rising temperature, leucocytosis, and oliguria, albuminuria and cylindruria. At autopsy, all presented the same picture: anasarca, pulmonary edema, and edema and congestion of kidneys. The latter showed definite signs of previous impairment and sclerosis, varying only in degree.

Case Reports

CASE 1.—A Filipino laborer was admitted to the hospital with a diagnosis of partial bowel obstruction. On admission, the blood count was 4,000,000 red cells, 78% hemoglobin, 9,400 white cells; the urine showed a trace of albumin and a few red cells in the sediment.

The day before the operation, he was given intravenously 1000 ml. of 5% glucose in normal saline and 500 ml. of glucose in lactate solution. At that time, another urinalysis still showed trace of albumin and red cells in the sediment. The day of the operation, he was given 500 ml. of 5% glucose in normal saline, 1000 ml. of 5% glucose in lactate solution, 250 ml. of plasma, 500 ml. of blood and finally 1000 ml. of 5% glucose in normal saline: in all, 3250 ml. of fluids. The next day he was given 2000 ml. of 5% glucose in normal saline and 500 ml. of plasma. A urinalysis in this same day showed albumin 4+ and numerous granular casts in the sediment. Although it was not measured, the output of urine was decreased. In spite of these findings, the second day after operation he was given 2000 ml. of 5% glucose in normal saline and one unit of plasma. Following the administration of plasma, the patient had chills and a temperature of 101° F. The third day, he was given another 2000 ml. of 5% glucose in normal saline and 1000 ml. of plasma; the fourth day, he was given 1000 ml. of glucose and one unit of plasma; the fifth day, he was given 1000 ml. of glucose in normal saline and one unit of plasma. During the afternoon of the same day, the patient became dyspneic, expectorated blood tinged sputum and developed fever of 103° F. He died in the course of a few hours.

Microscopic Examination

The kidneys show pronounced sclerosis which distorts or breaks the continuity of many collecting tubules. The glomeruli show various degrees of degeneration from matting of the tufts to complete obliteration and sclerosis. The tubules are mostly swollen, the epithelium detached, and the lumina filled with amorphous cast material. Pigment is present inside cells of convoluted and collecting tubules as well as extracellularly or in large blocks inside the lumina. Here and there, there is a moderate infiltration with round cells.

CASE 2.—A 54-year-old man was admitted to the hospital with the diagnosis of carcinoma of the rectum. At admission, blood pressure was 144/84; the lungs were clear, heart not enlarged and with regular rhythm. Urinalysis showed: specific gravity of 1.016, 2+ albumin and few granular casts. Blood count showed: red cells 3,400,000, hemoglobin 75%, white cells 6,850. Eagle test positive. Wassermann test positive. Blood chemistry showed: NPN 60 mgm.; total protein 4.3 gm., albumin 3.6, globulin 0.7, A/G ratio 5:1; chlorides 525 mgm.

Because of poor nutritional status, he was given a first transfusion of 500 ml. of blood. Next day the temperature rose to 100° F. and the urinalysis showed albumin 4+ and numerous granular casts in the sediment. Three days after the first transfusion, he received another transfusion of 500 ml. of blood, following which the temperature rose to 101°. Blood proteins were 7.4 gm., albumin 2.5 gm., globulin 4.9 gm., A/G ratio 0.5:1.

He was given three more blood transfusions, which failed, however, to raise the red blood count. The white cell count rose to 15,000. The day of the operation, he was given a transfusion of 1000 ml. of blood, an intravenous infusion of 1000 ml. of 5% glucose in normal saline and 1000 ml. of plasma. Two hours after the operation, the blood pressure was unobtainable, the apical pulse was 100. Another transfusion of 500 ml. of blood was begun, but was discontinued immediately because of the semi-comatose condition of the patient, who expired the same day.

From the Department of Laboratories, Hilo Memorial Hospital, Hilo, Hawaii. Pathologist at St. Francis Hospital, Honolulu, until Nov., 1948.

Read before the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 7, 1948.

Microscopic Examination

The kidneys show many glomeruli in various stages of degeneration. Those glomeruli which are still intact show marked congestion of the capillary tufts. The tubules are edematous and in many areas they contain either packed blood cells or masses of pigment. All throughout the vessels are extremely congested. There are areas of round cell infiltration around the glomeruli and around the convoluted tubules. Most of the cells are lymphocytes, but polymorphonuclears are fairly common.

CASE 3.—A 56-year-old man was admitted to the hospital with a complaint of general weakness, loss of appetite, soreness of joints and swelling of the left knee and foot. A urinalysis two months before the last admission had shown albumin 3+ and numerous fine granular casts. At this time, urinalysis showed a specific gravity of 1.010, albumin 3+, and numerous casts and blood cells in the sediment. The blood count was 2,260,000 red cells with 47% hemoglobin and 22,000 white cells with a percentage of 90 polymorphonuclears.

Because of the anemia, the patient was given a first blood transfusion, following which he developed tremor of the hands and mental confusion. He was treated with salicylates for several days and with 300,000 units of penicillin. A second blood transfusion was given a few days later. Six hours later, the patient had convulsions and the temperature rose to 101° F. A check of typing, including the Rh factor, was made, but revealed that there was complete compatibility between donor's and patient's bloods. Next day another blood transfusion was given. Four hours later, the patient appeared somewhat lethargic and apparently had difficulty in swallowing. Blood creatinine was 12 mgm. and NPN 139 mgm. Stools became tarry.

The following few days, the patient was given 1000 ml. of 5% glucose in normal saline intravenously each day, but in spite of the administration of fluids, urine output decreased sharply. A final blood transfusion was given, but the patient died soon afterward.

Microscopic Examination

The kidneys are very sclerotic. Many glomeruli have been replaced by fibrous tissue and those which are intact show various stages of congestion or degeneration. Those tubules which have not been destroyed by the process of sclerosis contain amorphous or cellular cast material and occasional pigment masses. The cells of the tubules are edematous and are either degenerating or laden with pigment. The vessels have thick walls and narrow lumen, and the renal stroma is infiltrated with round cells.

CASE 4.—A 36-year-old man was admitted to the hospital with a diagnosis of acute appendicitis and operated upon immediately. At the time of admission, he complained of great difficulty in voiding, but this difficulty was attributed to the severe pain in the right lower quadrant of the abdomen. Urinalysis showed only a trace of albumin and no casts.

Because of exudate present on the peritoneal surface of the appendix, the patient was given 1 gram of sulfanilamide and kept on this treatment for forty-eight hours. The patient did well for the first twenty-four hours, but because of a decrease of red blood cells from 4,800,000 at admission to 3,600,000 on the third day, he was given a blood transfusion on the fourth postoperative day. Following the transfusion, urinalysis showed albumin 3+ and numerous granular casts. During the next days, the patient was given five blood transfusions of 500 ml. each and intravenous infusions of 10% glucose or 5% glucose in normal saline in amounts varying from 1 liter to 2 liters daily. As the white count rose to a high of 38,000 and remained usually between 25,000 and 30,000 cells, sulfadiazine and penicillin were also administered to the patient. During this time, the output of urine decreased sharply, but no exact figures are available. Urinalysis showed albumin 4+, numerous coarse and fine granular casts, some waxy casts.

The patient died on the eighth day following admission.

Microscopic Examination

Changes in the glomeruli are those usually associated with chronic glomerulonephritis. The tufts are matted together or are shrunken and the capillaries are collapsed; only occasionally the cells appear edematous. Beside these findings, one occasionally sees pigment inside the cells or free cells in the capsule space. Many times the epithelium lining the capsule is detached or broken and lies in the space together with some amorphous material. The convoluted tubules are edematous and many cell nuclei stain either very palely or not at all. Very often the cells contain granules of pigment. The lumina of the convoluted tubules, as well as those of the collecting tubules contain amorphous matter, pigment or cast material.

Discussion

In all the four cases described above, there was some evidence of kidney damage before the transfusion, not sufficient, however, to give a clear warning. Daniels, Leonard and Holtzman [1] reported thirteen cases of renal insufficiency following transfusion. Many of their cases developed uremia after transfusion of compatible blood. At the autopsy table, outstanding lesions were edema of the lungs and enlarged, deeply congested, edematous kidneys. The authors point out the frequency of leucocytosis, nausea, vomiting and oliguria.

Dardinski [2] is of the opinion that the mechanism of oliguria or anuria may be toxic injury, pigment obstruction of renal tubules, acute nephrosis, hemoglobin infarctions and distention of tubular system by masses of hemoglobin pigment in the tubules in presence of acid urine. Campbell and Stickney [3] believe that in order to have functional renal insufficiency following a transfusion, there must be a previous impairment of renal function.

Ayer [4] and Ayer and Gauld [5] have studied renal

[1] Daniels, W. B., Leonard, B. W., and Holtzman, S.: Renal insufficiency following transfusion; report of 13 cases, J. A. M. A. 116:1208 (Mar. 22), 1941.

[2] Dardinski, V. J.: Pathology of anuria, Am. J. Clin. Path. 15:286 (July), 1945.

[3] Campbell, D. C., and Stickney, J. M.: Acute renal failure after gastric hemorrhage, and blood transfusion. Proc. Staff Meet. Mayo Clin. 17:145 (Mar. 11), 1942.

[4] Ayer, D.: Renal lesions associated with deep jaundice, Arch. Path. 30:26 (July), 1940.

[5] Ayer, G. D., and Gauld, A. G.: Uremia following blood transfusion. Arch. Path. 33:513 (Apr.). 1942.

lesions associated with deep jaundice and with uremia following blood transfusion. According to these authors, there is strong similarity between the renal lesions in deep jaundice and those following blood transfusion. Casts of pigment or granular material present in the tubules, edema of the epithelium, heavy leucocytic infiltration and edema of the interstitial tissue are findings common to both syndromes.

In three of the four cases described above fluids were given in addition to blood transfusion even after urinalysis had shown presence of albumin and casts.

Bauer [6] warns against indiscriminate administration of fluids by the intravenous route to promote diuresis and points out the danger of cerebral or pulmonary edema in case the glomerular filter is impaired. Rhoads [7] points out that post-operative salt intolerance is an established fact and that amounts of salts easily excreted by a normal individual lead to salt retention and edema if administered immediately after major surgical procedure. Carlyle Cooke [8] in discussing some chemical problems confronting the surgeon points out that a normal healthy individual will not take over 15 grams of salt in 24 hours. Yet many patients receive 2000 and sometimes 4000 ml. of saline daily, that is, from 18 to 36 grams of salt daily. Of course, if the kidneys are healthy, the body will finally eliminate excessive salt and excessive fluids but in case of intravenous administration, salt will pass quickly to the tissues before it reaches the kidneys, therefore favoring retention of water and catabolites.

It seems rather clear that once renal function has been impaired by blood transfusion, intravenous administration of glucose or saline or even plasma only make the matter worse.

The movement of fluid between blood and tissue, according to Moon,[9] depends upon the action of several factors, including capillary blood pressure, osmotic pressure, electrolytic concentrations, hormonal substances and others. The presence of a normal semipermeable membrane, endothelium, is necessary to preserve the balance between intravascular and extravascular fluids.

It is generally accepted by many practitioners that administrations of plasma together with other fluids may restore plasma proteins of the patient and thus prevent retention of water by the tissues. Hypoproteinemia, which often occurs in patients after surgical operations, is not, however, a cause of edema *per se*.[10] Unless adequate salt and water supply is present, a low plasma albumin will not result in edema.[11] Andrus [12] has pointed out that administration of saline infusions will increase the escape of proteins from the blood stream. Such condition of hypoproteinemia associated with excessive water administration may only be detrimental to the patient under treatment and favor visceral edemas.

Abbott [13] points out in his excellent review of fluid balance that even when colloid osmotic pressure has been greatly increased by plasma or blood, fluid will not be drawn back into the circulation. Normal exchange of fluids may be affected because capillary permeability is increased by anoxia, drugs or inflammation or because of failure of the kidneys to excrete water and salt in a normal fashion.

Allen [14] states that in absence of organic diseases, limit of tolerance for saline solutions is high. The lungs are the weakest point in the circulation and pulmonary edema may be the most dramatic outcome of saline infusions in case of traumatic shock or renal insufficiency.

Of course, for the general practitioner it is not sufficient to point out the danger of transfusion and intravenous administration of fluids, but it is necessary to indicate how such danger may be avoided. A very simple procedure, to my mind, is to make repeated examinations of urine before and after transfusion and to take into consideration specific gravity, presence of albumin, red cells and casts. A heavy trace of albumin, appearing and persisting after a blood transfusion of a patient who has a known renal lesion or trace of albumin, should discourage from any further attempt of hemotherapy. To determine the degree of hydration, Metger, Herr and Levy [15] suggest taking into account hematocrit values, plasma proteins, red cells and hemoglobin and weight. Shaw and Smith [16] suggest hematocrit readings and determinations of plasma proteins and plasma chlorides in order to control intravenous infusions of saline or glucose solutions. Abbott [13] points out, however, that changes in distribution of water and salts may be very imperceptible, unless they

[6] Bauer, J.: Dangers of indiscriminate forcing of fluids, Med. Rec. (Mar. 19), 1941.

[7] Rhoads, C. P.: Studies of patients with gastric cancer, J. Nat. Cancer Inst. 7:333 (April), 1947.

[8] Cooke, G. C.: Some chemical problems confronting the surgeon, South Med. and Surg. 102:165 (Apr.), 1940.

[9] Moon, V. H.: The vascular and cellular dynamics of shock, Am. J. Med. Sc. 203:1 (Jan.), 1942.

[10] Caster, D.: The problem of hypoproteinemia in surgical patients, Surg. Gynec. Obst. 72:178 (Feb. 1), 1941.

[11] Himsworth, H. P.: Protein metabolism in relation to disease, Proc. R. Soc. Med. 40:27 (Nov.), 1946.

[12] Andrus, W. P.: Present concepts of the origin and treatment of traumatic shock, Int. Obst. Surg. 75:161 (Aug.), 1942.

[13] Abbott, W. E.: Review of the present concepts of fluid balance, Am. J. Med. Sc. 211:232 (Feb.), 1946.

[14] Allen, F. M.: Theory and therapy of shock; excessive fluid administration, Am. J. Surg. 61:79 (July), 1943.

[15] Metger, H., Herr, R., and Levy, L.: Apropos de l'hydremie au cours des nephrites, La Presse Med. 55:759 (Nov. 8), 1947.

[16] Shaw, A. E. F., and Smith, A. D.: The value of biochemical methods in the control of intravenous infusions, Med. J. Australia, 2:301 (Sept. 16), 1944.

are referred to total body water and salts. Physical examination may give already a good indication of the state of the patient, as for example, appearance of tongue, elasticity of skin, tension of the eyeballs. Furthermore the mental alertness, turgor of the skin, weight and sensation of thirst of the patient are factors to be taken into consideration together with changes in amount and specific gravity of urine. He believes that too much reliance is placed on isolated determinations of concentrations of substances in the blood, especially chloride and proteins.

In conclusion, it appears evident that blood transfusion and administration of fluids to patients with renal impairment should not be carried out or should be carried out with extreme caution and that constant vigilance is necessary to prevent fatal complications.

Summary

Four cases are presented in which fatal renal complications followed compatible blood transfusions. In three of them, additional intravenous administration of fluids helped aggravate the situation. It is suggested that blood transfusions and forcing of fluids be avoided in patients already showing signs of renal impairment. Determination of hematocrit values, plasma proteins and plasma chlorides may be helpful in studying water metabolism.

Discussion

Leon E. Mermod, M.D.: There is a progressive awareness among physicians in general that transfusions of compatible blood are not always innocuous procedures. A relatively small percentage of patients are definitely injured by infusions of blood. As our knowledge increases concerning certain factors, we will be able to foresee in which patients difficulty may be encountered, and be prepared to deal with it both prophylactically and therapeutically when the occasion arises.

Dr. Gerundo has well covered the subject of the possible danger attending transfusions in cases wherein there may be some previous renal damage. We are, at present, unable to foretell which nephritic will exhibit dangerous reactions. We know that many cases of glomerulonephritis, lipoid nephrosis and others of the same type, can and do receive repeated transfusions of blood and plasma without adverse incident. It is probable that there must be present an additional factor to precipitate such an outcome to transfusion.

I would like to refer you to the article by Dr. Tracy B. Mallory, entitled "Hemoglobinuric Nephrosis in Traumatic Shock," which appeared in the *American Journal of Clinical Pathology,* June 1947. Also I refer to the article by Muirhead and associates entitled "Acute Renal Insufficiency due to Incompatible Transfusions," published in *Blood,* special issue No. 2, January, 1948.

Mallory discusses the syndrome of renal insufficiency following resuscitation from shock with or without transfusions of compatible blood and plasma. This syndrome has variously been called lower nephron nephrosis or hemoglobinuric nephrosis, and may develop in various conditions in which shock occurs. Clinically, the patient, having suffered either external or internal trauma, is seen in shock; the shock is treated by transfusions of blood, plasma, or even electrolytes. Subsequently the patient develops oliguria, restlessness, and edema, and may become anuric. Frequently death supervenes. The pathological changes are found primarily in the lower nephron, the collecting and distal convoluted tubules. Pigment casts are almost always present. Degeneration of the epithelium may occur before regeneration takes place. In previously undamaged kidneys, the glomeruli are relatively unaffected. These typical changes were found in Dr. Gerundo's cases.

In the cases described this evening, there was marked shock in one of the cases and moderate shock in another; the fourth case received sulfa drugs. In three of the cases, thus, there apparently was some additional factor besides the glomerular damage previously present. The fourth case possibly had such severe renal damage, both of the lower nephron and the glomeruli that no additional factor was needed.

In three of the cases additional fluid was given apparently to "force the kidneys to excrete urine." Muirhead urges, in the treatment of this type of renal insufficiency, first, that only lost fluid be replaced; second, that the carbon-dioxide combining power of the blood be maintained close to normal with sodium bicarbonate; and third, that salt be withheld until again it be excreted by the kidneys. Forcing fluids will lead to edema and will not cause the kidneys to secrete urine.

Brain Tumors in Hawaii, 1938 - 1948

Statistical Review of 85 Verified Cases

RALPH B. CLOWARD, M.D.
HONOLULU

ALL lesions in medicine appear to become more frequent as we become more familiar with them. It has not been so many years ago that appendicitis was an unknown ailment. It then became a rare condition and finally a very common one. And so it is with brain tumors. The two great educators in medicine are autopsies and operations. In the past twenty-five years, tumors of the brain have ceased to be rare, chiefly because of the rapid advances that have been made in the surgical treatment of these lesions. This has put the pathologist on the lookout for them at the autopsy table. Brain tumors are now coming into the list of common maladies.

When I came to Hawaii in 1938, I was informed by one of my colleagues that brain tumors were very rare in Hawaii. "In over fifteen years experience here," he said, "I have only seen two tumors, both at autopsy."

In the past nine years, we have diagnosed and proven by operation 71 intracranial neoplasms, and have found at autopsy 14 more: a total of 85 tumors. One may ask: if these tumors are so common, what became of them prior to 1938? The answer is obvious! They were either unrecognized clinically or not looked for by operation or autopsy.

To return to our analogy of appendicitis, two accomplishments have transformed the prohibitive mortality in the treatment of appendicitis into one which should be almost nil: first and foremost, an early and accurate diagnosis; and second, an early and efficient operative procedure which eradicates the disease. These same two factors are all-important in the treatment of brain tumors.

Early Diagnosis

Responsibility for the early recognition of the possible presence of an intracranial growth rests on the shoulders of the general practitioner. If we expect to advance farther in the treatment of these lesions, it is here the attack must be centered.

Physicians in general are reluctant, however, to attempt the diagnosis of an intracranial tumor because of a general impression that an accurate localizing diagnosis is difficult to make. The localization of the lesion is the job of the specialist; the family doctor's responsibility need go no farther than suspecting the patient as having a tumor and referring him early to the specialist. The physician should be constantly on the lookout for any symptoms, referable to the nervous system, which may be progressive in nature.

History

Brain tumors give two types of signs and symptoms: (1) localizing symptoms, (2) general pressure symptoms. The so-called cardinal signs of brain tumor—headache, vomiting, and choked disc—are merely signs of increased intracranial pressure. They are usually evidence that the tumor has already reached such a size that the cranial cavity is no longer able to accommodate it. When these signs occur, the tumor has usually attained a formidable size.

The manifestation of an intracranial tumor which is of most diagnostic significance is a gradual, progressive change in nervous function, followed by actual loss of function. These are localizing symptoms. The nature of the loss of function will vary with the location of the lesion; the rate at which the loss occurs will depend on the pathology of the tumor.

Findings

To determine the loss or impairment of function of the nervous system, the physician must first take a careful history, and second be able to do a rough neurological examination. Some of the important points in the patient's history which should make one seriously consider the presence of an intracranial lesion are: (1) *convulsions,* appearing after the patient has reached adulthood; (2) complaints of *failing vision*; (3) continuing *headaches*; (4) spells of unexplained *vomiting*; (5) progressive *weakness* of one or more extremities; and (6) *irritability* and lack of concentration, especially in children.

One need not have a detailed knowledge of neurology in order to suspect a central nervous

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system lesion. Every physician, however, should be able to check roughly the function of the cranial nerves. Tests of the sense of smell and the visual acuity, and a gross visual field determination, made by having the patient fix his gaze on the examiner's nose while the latter moves his hands in the various fields of vision, can be made by any physician. A look into the eye with the ophthalmoscope may demonstrate a choked disc or other evidence of increased intracranial pressure. Weakness of external occular muscles can be demonstrated if the patient complains of diplopia; and if nystagmus is seen a cerebellar lesion may be suspected. Loss of a corneal reflex or numbness of half of the face may suggest a fifth nerve lesion. Facial weakness, loss or decrease of hearing in one ear, decreased gag reflex, nasal voice or difficulty in swallowing may be found, indicating the presence of a lesion involving the medulla, usually a benign neurofibroma of the acoustic nerve.

It is obvious that any unexplained progressive weakness of the extremities, especially when involving only one side, should be considered due to an intracerebral lesion until proven otherwise. An increase in the tendon reflexes, with Babinski's sign, should strengthen this consideration. A staggering gait, or ataxia or incoordination in the use of one hand, may indicate the presence of a cerebellar lesion.

Skull X-ray

After obtaining a history which suggests intracranial pathology, and doing a rough neurological examination, the third important procedure is a roentgenogram of the skull. This is a seemingly obvious suggestion, but often the skull is not x-rayed for weeks, months or even years after the symptoms of intracranial pathology have been present. If the lesion in the brain contains calcium, it may be readily demonstrated by the x-ray. It has been shown in large series of brain tumors that 13 per cent of all infiltrating malignant lesions calcify and over 60 per cent of other intracranial neoplasms will contain calcium deposits! If the x-ray demonstrates no intracerebral calcification one may see a displaced calcified pineal body; thickness or localized increased density of one of the skull bones (as in meningiomas or osteomas, which invade the diploë of the skull); or decreased density or erosion, produced about the internal auditory foramen by an acoustic neuroma.

Lumbar Punctures

Finally, a word of warning may be offered about lumbar punctures. It is the unfortunate practice of many doctors, when a patient with neurological symptoms is first seen, to quickly turn the patient over and do a lumbar puncture, as if by some mystic power the diagnosis will be revealed to him. Although the results are usually disappointing and non-informative, the practice is nevertheless continued. It cannot be repeated too often, or impressed upon physicians too much, that lumbar puncture in the presence of increased intracranial pressure is a most dangerous procedure, the danger to the patient far surpassing the meager diagnostic information obtained. It has quickly and alarmingly placed many a patient with a brain tumor in a stuporous or comatose condition, or even directly contributed to his death. The removal of even a small amount of fluid has caused the lower end or tonsils of the cerebellum to herniate into the only available outlet of the skull—the foramen magnum—thus compressing the vital centers in the medulla.

So often, the reason for doing a lumbar puncture is to rule out syphilis or tuberculosis. Since cerebral gummas and tuberculomas are very rare lesions (less than 1 per cent of all brain tumors) the importance of obtaining cerebrospinal fluid for their diagnosis can easily be greatly overemphasized. There should be an irrevocable rule imbedded deep in the mind of every physician that a lumbar puncture should *never* be done without first examining the optic discs with an ophthalmoscope for signs of increased intracranial pressure. If evidence of increased pressure is found, it is far safer (if fluid must be obtained for examination) to trephine the skull and tap the ventricle. This will, at the same time, moreover, permit visualization of the brain by ventriculography.

The work-up by the physician on a patient with a suspected brain tumor should include, then, a careful history, a complete physical examination, a rough neurological examination, roentgenogram of the skull and, finally, a roentgenogram of the chest. Because of the frequency of metastasis to the brain of primary carcinomas of the lung, this lesion should be suspected and looked for in every patient over thirty years of age. When these investigations have been completed, the physician has done all that is required in his field of endeavour. The subsequent procedures, i. e. obtaining cerebrospinal fluid for differential diagnosis, localization of the lesion, securing roentgenograms of the brain, and, finally, the operative attack are all in the domain of the neurosurgeon.

Prognosis

When a tentative diagnosis of brain tumor is made and the patient or a relative is so informed, the first question asked of the family doctor is "what are my chances of getting well?" It is the purpose of this paper to break down our series of 85 verified brain tumors encountered in Hawaii in the past nine years, in order to acquaint the physicians of the territory with the end results of these lesions and factors which influence these results.

The first question which must be answered to evaluate the prognosis is, "is the tumor benign or malignant?" The difference between these two kinds of new growth must be described to the patient. A benign tumor is described as one which grows on the outside of the brain. It is usually a round, hard, encapsulated, discrete mass attached to one of the coverings of the brain or cranial nerves, and does not invade the brain tissue itself. It produces symptoms merely by pressure upon the brain. These tumors can usually be removed without damage to the brain. The function of the compressed brain returns, and the patient makes a good recovery. In this group of tumors are included the meningiomas, acoustic neurinomas, pituitary tumors, the lesions of vascular origin and others.

Malignant tumors of the brain include (1) the primary neurogenic lesions arising from nervous tissue, and (2) secondary metastatic lesions originating in other organs of the body and spreading to the brain by way of the blood stream.

The primary neurogenic tumors or gliomas are described to the patient as growing within the substance of the brain and spreading through it like the roots of a tree. It is impossible to remove such a lesion without removing part of the brain with it. The chances that enough of the brain can be removed to get all the roots of the tumor are usually not very good. Surgical treatment for this kind of tumor, therefore, is only palliative, for relief of symptoms. If the tumor cannot be completely removed, it continues to grow—some more rapidly than others—and the patient eventually succumbs.

The life expectancy of a patient with a glioma depends upon two factors. The first factor is *the pathologic nature of the neoplasm.* The highly malignant undifferentiated gliomas, such as the glioblastomas and medulloblastomas, grow very rapidly, and the patient will die within three months to a year regardless of the treatment instituted. The slow-growing gliomas on the other hand, such as astrocytomas and oligodendrogliomas, may grow for fifteen or twenty years before endangering the patient's life.

The second factor, *the location of the neoplasm in the brain,* will determine whether or not it can be attacked surgically and removed. Tumors growing in silent areas of the brain, such as the right frontal lobe or a cerebellar hemisphere, can be radically excised without leaving the patient with a serious handicap, and the malignant lesion may thus be completely eradicated. Tumors growing in the optic chiasm, basal ganglia or brain stem, on the other hand, are obviously inoperable.

Another question which may be asked by the patient, if the tumor be a malignant one, is "will the cancer spread to other parts of the body?" Malignant gliomas, as already stated, arise within the substance of the brain and are composed of cellular elements of the nervous system. They do not metastasize via the blood stream to any other organ or part of the body outside the central nervous system. They spread by direct extension into adjacent areas of the brain and destroy the patient when the function of vital centers is impaired by invasion of the tumor or by intracranial pressure.

Metastatic or secondary malignancy of the brain needs little discussion. When the primary lesion is known and cerebral symptoms appear, a fatal prognosis is obvious. These lesions become neurosurgical problems only when the primary lesion is not recognized or cannot be demonstrated. This is particularly true of bronchiogenic carcinomas. The primary lesion may be the size of a pea, asymptomatic, and not demonstrable roentgenologically. The cerebral metastasis is misinterpreted as being a primary brain tumor.

This brings us to the final question which is usually asked. "Is it possible to tell before operation if the suspected tumor is malignant or benign?" The answer is *NO*! There is absolutely no method whereby one can *positively* predict the pathology of the lesion, except by microscopic examination of a portion of the tumor. There has been growing enthusiasm in recent years for the diagnostic procedure of cerebral angiography, to predict preoperatively the pathology of the tumor. Injecting an opaque substance into the internal carotid artery permits visualization of the pattern of the vascular bed of the neoplasm by x-ray. This procedure not only visualizes the location, but the size of the tumor, and comes closer to telling us the pathology to suspect than any other diagnostic method. But it is not positive.

It may be said, then, that all suspected intracranial neoplasms, with exceptions of secondary metastatic carcinomas, in which the primary lesion

BRAIN TUMOR STATISTICS
1938—1948

PATHOLOGY	Cases	Age Average	Male	Female	Caucasian	Japanese	Chinese	Filipino	Hawaiian	Colored	Samoan	Porto Rican	Korean	Operated	Autopsy	Living	Dead
BENIGN TUMORS																	
Meningiomas	17	40	10	7	8	5	1	3						14	3	9	8
Vascular Tumors	11	23.8	6	5	7	2	1	1						11	0	5	6
Acoustic Neuromas	3	37	1	2	2	1								3	0	2	1
Pituitary Tumors	3	34	3	0	3									3	0	1	2
Angioneurofibroma	1	15		1									1	1	0	1	0
Totals	35		20	15	20	8	2	4					1	32	3	18	17
MALIGNANT TUMORS																	
Glioblastomas	10	45.7	10	0	8	1	1							10	0	0	10
Cerebral Astrocytomas	7	33	3	4	6		1							6	1	3	4
Cerebellar Astrocytomas	6	16	5	1	2	1	1			1		1		5	1	3	3
OPTIC CHIASM and BRAIN STEM TUMORS	8	13	5	3	2	3			2		1			1	7	0	8
Medulloblastomas	3 1	6 53	4	0	3			1						4	0	0	4
Pineal Tumors	3	18	2	1	2		1							1	2	0	3
Ependymoma	1	34	1			1								1	0	1	0
Glial Sarcoma	1	9	1		1									1	0	1	0
Totals	40		31	9	24	6	4	1	2	1	1	1		29			32
Metastatic	10	39.7	5	5	7	2		1						10		0	10
Totals	50		36	14	31	8	4	2	2	1	1	1		39	11	8	42
GRAND TOTAL	85		56	29	51	16	6	6	2	1	1	1	1	71	14	26	59

is known, are entitled to the benefit of a surgical exploration if for no other reason than to determine the pathologic nature of the lesion. Frequently a tumor suspected clinically of being malignant and inoperable proves to be small and benign. It may be easily removed and the patient restored to normal health.

Benign Tumors

Of the 85 verified intracranial neoplasms 35 were considered benign. These included 17 meningiomas, 11 tumors of vascular origin, 3 acoustic neuromas, 3 pituitary tumors and 1 neurofibroma which invaded the skull. Of the 35, 32 were operated upon. Of these, 18 patients are living and well. Conspicuous by their absence in our series were craniopharyngiomas and benign colloid cysts of the third ventricle.

Meningiomas

There were 17 of these benign encapsulated tumors; 14 were operated upon, and 3 found at autopsy. Nine patients are living and well. The 5 operative deaths were due to post operative infection in 3 cases; 1 case, an inoperable tumor because of its size and location, died on the operating table; and 1 died two years after the operation in the Territorial Hospital. The deaths were all prior to 1943. There were 10 males, 7 females; the average age of the adult patients was 40 years. There was one child 4 years old from whom a 180-gram tumor was removed, with recovery. The average size of the tumors was over 100 grams (smallest 34 grams, largest 267.7 grams). The early recognition of these tumors, before they attain a formidable size, increases the patient's chances of surviving the operation without disability. The racial distribution included 8 Caucasians, 5 Japanese, 3 Filipinos, and 1 Chinese.

Vascular Tumors

Eleven tumors of vascular origin were operated upon. They included 4 cystic hemangiomas and hemangioblastomas of the cerebellum, 1 living and well, 2 survived four years after operation and died of recurrence; 2 large aneurysms simulating neoplasms both died; 2 simple venous angiomata, of which 1 survived; 2 patients with periarteritis nodosa both survived; 1 patient with papilloma of the choroid plexus of the fourth ventricle is living and well nine years postoperatively. Of the 11 patients, 5 are living and well. There were 6 males, 5 females; average age of patients, 23.8 years. Racial groups were: 7 Caucasians, 2 Japanese, 1 Filipino, 1 Chinese.

Pituitary Tumors

Three cases all had huge tumors with symptoms from 1 to 5 years preoperative. The two chromo-

phobe tumors died postoperative. The one chromiphil tumor, a severe acromegaly, is living and well after 6 years. All patients were males. All Caucasians, average age 34 years.

Acoustic Neuromas

Three cases, two are living and well after 7 years: 1 male, 2 females; 2 Caucasians, 1 Japanese. The average age was 37 years. These cases were operated upon before 1940. No tumors of this kind have been encountered since.

Angioneurofibroma of Scalp

This lesion, invading the skull in a Korean girl, was first seen when she was 5 years old. Operated upon 3 times for recurrences, she is living and well today, age 15 years.

Of the 35 benign tumors operated upon, 18 are living and well after 9 years, a survival rate of about 50 per cent.

Malignant Tumors

Of the 85 intracranial neoplasms, 50 were found to be malignant; of these 40 were primary tumors arising from nervous tissue and 10 were secondary metastatic lesions.

The Malignant Gliomas

The primary brain tumors included 10 cases of glioblastoma multiforme, 13 astrocytomas, 8 tumors arising in the optic chiasm, basal ganglia and brain stem, 4 medulloblastomas, 3 pineal tumors, 1 glial sarcoma, and 1 ependymoma.

Twenty-nine of these 40 patients were operated upon, of whom 8 are living and well; the 11 cases not operated upon were recognized as having inoperable tumors before death. All were verified by autopsy.

The ten patients found to have glioblastoma multiforme were all males, with an average age of 45.7 years. The average duration of symptoms prior to operation was 3.6 months. The average length of life postoperative was 4.2 months. All patients are dead. There were 8 Caucasians, 1 Japanese, 1 Chinese.

The 4 cases of the other highly malignant glioma, the medulloblastoma, are also all dead. There were 3 children, with an average age of 6 years, all Caucasians; and one adult, a 53 year old Filipino! All tumors were in the cerebellum.

There were eight tumors of the optic chiasm, basal ganglia and brain stem, only one of which was operated upon. The others were verified by autopsy. All patients are dead. Two patients had gliomas of the optic chiasm and 6 had infiltrating gliomas of the midbrain, pons and cerebellum. There were 5 males and 3 females; the average age was 13 years.

The three cases with primary tumors of the pineal body, one teratoma and two infiltrating pinealblastomas, all died. Only the teratoma was operated upon, erroneously diagnosed as a cerebellar lesion.

There were 13 astrocytomas, 7 cerebral and 6 cerebellar tumors. Eleven were operated upon, and after nine years, 6 are living and well.

The prognosis for longevity in these slow-growing gliomas is good. The average age of the patients with cerebral tumors was 33 years, and of those with cerebellar lesions 16 years. There were 8 Caucasians, 2 Chinese and 1 each Puerto Rican, Japanese and Negro (the only Negro patient in the series).

One patient with a huge midline calcified intraventricular ependymoma, a 34 year old Japanese man, is well, after five and one-half years. He has a hemiplegia. The tumor was removed in three stages.

Secondary Malignant Tumors

The 10 metastatic tumors operated upon were not recognized as metastasis preoperatively. They included 4 bronchiogenic carcinomas, 2 melanomas, and 1 each carcinoma of breast, primary sarcoma of skull, chorionepithelioma and retinoblastoma. There were 5 males and 5 females, with an average age of 39.7 years. Seven were Caucasians, 2 Japanese and 1 Filipino. These patients have all succumbed to their tumors.

Summary and Conclusions

A statistical study of the frequency of various types of brain tumors in different race groups has never been made, as far as we have been able to determine from the literature. Since Hawaii is a melting pot of many races, Oriental, Occidental, Polynesian, etc., it was hoped by reviewing our cases that some conclusions as to racial incidence could be drawn. However, we are forced to conclude that these 85 verified tumors do not indicate the number of brain tumors occurring in the islands per capita, nor do they accurately represent the true racial distribution. This conclusion is based upon the fact that members of certain Oriental races, particularly the Chinese, have so many religious superstitions and fears that consent for operations, especially on the brain, and consent for autopsy examinations, are difficult to obtain. I have seen in consultation, and heard indirectly of, many Chinese patients with suspected intracranial

tumors who refused any form of surgical treatment, preferring to rub Chinese herbs on their heads. Their obituaries would appear a few months later in the newspaper, and their tumors were never verified.

Our statistics show that, out of 85 tumors, 51 occurred in Caucasians and 29 in Orientals. It would appear that brain tumors occur almost twice as frequently in the Caucasians as the Oriental since the population of the two racial groups has been about the same in Hawaii since 1938. However, for reasons stated above, it is our belief that the racial incidence in Orientals should be much higher than these figures indicate. The racial grouping included 51 Caucasians, 16 Japanese, 6 Chinese, 6 Filipinos, 2 Hawaiians and one each of Korean, Samoan, Puerto Rican and Negro. As to sex incidence, there were twice as many males as females, 56 to 29.

There seemed to be no particular predilection for any specific type of tumor to be more frequent in one race. A general statement may be made, however, that benign tumors have been seen more frequently in the Oriental races than the malignant ones. The malignant glioblastoma was found in the Orientals in only 2 cases out of 10. They are likewise rare in women; no case of this type of tumor was found in a female. The meningiomas, on the other hand, are common in the Oriental races of both sexes; 9 cases were in Chinese, Japanese or Filipinos, compared to 8 Caucasians.

It is hoped that ten years from now, a similar statistical review of brain tumors in Hawaii may add more factual information to this preliminary report.

A plea is made to the physicians of the Territory to be continually on the lookout for patients whose symptoms suggest a brain tumor. As with all neoplasms, the early recognition of the existence of the lesion offers the patient the best hope of recovery. This, combined with the great advancement of modern diagnostic and surgical methods, can and should greatly reduce the mortality and morbidity of brain tumor.

388 Young Hotel Building.

Eclampsia and the Weather in Hawaii
A Preliminary Study

H. E. BOWLES, M.D.
HONOLULU

THE close association of weather changes with the exacerbation of disease processes has been observed since ancient times. Twenty-five hundred years ago, Hippocrates made a number of clinical observations on this association which cannot be excelled today for accuracy and vividness. Since his time, scientific research has added greatly to our knowledge of the subject. Petersen,[1] in his volumes on "The Patient and the Weather," correlates atmospheric changes with diseases of the human body in so convincing a manner that the most hardened skeptic cannot but feel that there is, after all, something to the idea.

Weather Changes and Eclampsia

Hippocrates was one of the early observers of the coincidence of convulsions in women in advanced pregnancy with violent weather changes. Smellie,[2] the famous London obstetrician of the eighteenth century, has the following to say concerning convulsions during labor. "In the course of this year, I attended several patients who were attacked in this manner near their full time, some of whom were relieved by blooding and blistering, and went on to the usual period, while others, with whom this method did not succeed, were, with the children, saved by immediate delivery. Other practitioners had cases of this kind, during the same time so that they seem to have proceeded from the constitution of the weather." Unfortunately, he does not explain what he means by "constitution of the weather." By inference he probably refers to some atmospheric disturbances.

Sapeika,[3] of Cape Town, feels that weather does not have any clear-cut causal significance but may precipitate eclamptic convulsions or coma in the pre-eclamptic.

For a clearer understanding of the subject, everyone interested should read the article by Fuerstner and Sargent[4] entitled "The Meteorotropism of Eclampsia." The causes of weather change are discussed in great detail and emphasis is placed upon the fact that atmospheric disturbances are dependent upon the passage of the so-called discontinuity surface, or front, which separates air masses of opposite characteristics. Where these two air masses meet, atmospheric disturbances occur. Petersen[1] has made detailed biometeorographs which show beyond a doubt the association of eclamptic convulsions with variations in environmental temperature, barometric pressure and humidity. Petersen's work should also be read in order to understand the possible explanation of the pathological physiology of eclamptic convulsions. He calls our attention to many similarities among eclampsia, migraine, epilepsy, and other types of convulsive seizures in which angiospasm plays a great part. He further emphasizes that there is an overwhelming increase in the frequency of eclamptic convulsions as we proceed southeast (in North America) on the one hand, and also when we reach the terminus of the storm track region south of the St. Lawrence River. In addition, he points out that the negress dies more frequently from puerperal convulsions as she moves southward, rather than north.

Seasonal Incidence of Eclampsia

Many writers have made general statements to the effect that the incidence of eclampsia varies according to the season—such references are too numerous to enumerate here in detail—and many of them are directly contradictory. Most of them miss the point that is brought out by Petersen, Fuerstner and others; that it is not the seasons *per se* but the atmospheric disturbances within these seasons that determine the incidence of eclamptic and other convulsive seizures. A seasonal pattern is followed, of course, wherever these weather changes are more numerous at certain times of the year. In temperate zones and in the hurricane and typhoon zones of warmer climates, this follows a fairly clear-cut course.

Read before the 58th Annual Meeting of the Hawaii Territorial Medical Association, May 7, 1948.

[1] Petersen, W. F.: The Patient and the Weather, Vol. I, Part I, Edwards Bros., Inc., Ann Arbor, Michigan, 1935, pp. 14, 15.

[2] Smellie, W.: Midwifery, Vol. II. W. Strahan: T. Cadell, and G. Nicol, in the Strand; and W. Fox, and S. Hayes, in Holborn, London, 1779, p. 285.

[3] Sapeika, N.: Weather Changes and Eclampsia, J. Obst. & Gynaec., Brit. Emp. 53:461 (Oct.), 1946.

[4] Fuerstner, P. G., and Sargent, F.: The Meteorotropism of Eclampsia, J. Lab. & Clin. Med. 25:779-788 (May), 1940.

Weather Variations in Hawaii

It is not difficult to understand how violent changes in temperature, humidity, barometric pressure, wind velocity, and so forth, may be associated with disturbances in the normal or diseased human being in temperate zones and in the hurricane and typhoon zones in the tropics. In Hawaii, however, the changes in the weather are as a rule so subtle as to be almost indistinguishable. Some discussion on meteorological and geographical conditions in Hawaii is in order for readers unfamiliar with local conditions.

If unfavorable weather conditions do exist in Hawaii, what are they, and do they have any part in precipitating eclamptic convulsions? It is known to those of us who reside in Hawaii that there are periodic spells of so-called "Kona" weather during which we experience physical discomfort. It is also generally believed that asthma, hay fever, enteritis, and numerous other physical ailments are apt to be aggravated at these times. For some time, I have felt that edema, blood pressure rises and other phenomena are more numerous at these times in the last trimester of pregnancy, and that those women already exhibiting signs and symptoms of late toxemia are more apt to be pushed over into true eclampsia during these spells when our natural air-conditioning (the trade wind) is shut off.

The main group of the Hawaiian Islands lies due south of the Alaskan Peninsula near the northern limit of the tropics and, therefore, directly west of the central portion of Mexico. Approximately one-fourth of the Territory lies at elevations below 650 feet and contains by far the greater percentage of the population. The outstanding features of the climate are the remarkable differences in rainfall over adjacent areas, due to topography; the high percentage of hours of sunshine over leeward lowlands and the persistent cloudiness over or around mountain peaks nearby; the remarkably equable temperature and barometric pressure from day to day, and the small differences in temperature between summer and winter months; the persistency of the trade winds; and the rarity of damaging storms of any kind.

Effective Temperature

Over a period of forty-one years, according to tables compiled by Chapman, the average temperature was 74.7° F. (average maximum 79.8° F.; average minimum 69.6° F.). Relative humidity over a period of twenty-six years averaged 67 per cent (at 8 A.M., 68; noon, 62; and 8 P.M., 71). The average hourly wind velocity was 8.6 miles per hour (with a northeast wind prevailing). This gives Honolulu an average "effective temperature" of 70.5° F. in still air (only found indoors) or 63.7 degrees with the wind blowing 500 feet per minute (about 6 miles per hour). Chapman[5] states that the ancient Hawaiians, when dressed in tropical clothing (breech clout or short skirt with chest bare) lived under conditions very near to producing the ideal "effective" temperature (64° F.).

For twenty-six years, 63 per cent of the days in Hawaii were sunny; in forty-one years, only nineteen days had a temperature of 60 degrees or below; for twenty-six years, only 0.3 per cent of the time was characterized by "calm." In 1931, for example, there were only eight hours of "calm." On rare occasions, conditions distinctly outside the comfort zone do occur in Hawaii. For instance, on October 10, 1931, the highest temperature of Honolulu was 80° F. with a relative humidity of 97 per cent and a wind velocity of only 3.9 feet per minute, producing an effective temperature of 79° F., 8° F. above the comfort line. Even then, if the wind had blown as much as 500 feet per minute, the effective temperature would have been in the comfort zone.

Barometric Pressure

The barometer in Honolulu varies remarkably little from the mean. In any single day, the difference between maximum and minimum readings very rarely exceeds 6 millibars (0.16 inches or 6.4 mm.), whereas the daily range in most parts of the mainland often amounts to as much as 50 millibars (1.32 inches or 53 mm.). Cyclonic storms are extremely infrequent.

It should then be clear from the foregoing data that violent atmospheric disturbances such as are seen in the temperate zones and in typhoon and hurricane areas in the warmer climates, are virtually non-existent in Hawaii. Insofar as temperature and barometric pressure effects on late toxemias of pregnancy are concerned in Hawaii, at or near sea level, we can virtually rule them out. We cannot speak for the higher altitudes, as no data are available.

Kona Weather

The term "Kona" is Hawaiian, and signifies the leeward side. Because of this it is often used (incorrectly) to mean "southerly," which is true for Honolulu but not necessarily for other localities. There are no sharply defined dry and wet seasons; a winter month is sometimes the driest month of the year, and occasionally a summer

[5] Chapman, H. S.: The Hawaiian Climate, The Queen's Hospital Bulletin 9:1-10 (Jan.-June), 1933.

month is the wettest. On the average, however, considerably more rain falls during the cooler than during the summer months except in the Kona region of the Island of Hawaii where, due to high mountains to the east, the influence of the trade winds is lost or greatly modified, and land and sea breezes develop and attain their greatest strength and persistency during the summer, resulting in the occurrence of most of the rain during the warmer season. Aside from the area just mentioned, and a few others like it, where most showers occur during the afternoon hours, probably two-thirds of the rain in the Islands occurs at night; and, in general, the heaviest amounts fall at elevations above the most thickly settled zones of population (U. S. Dept. of Agriculture Weather Bureau).

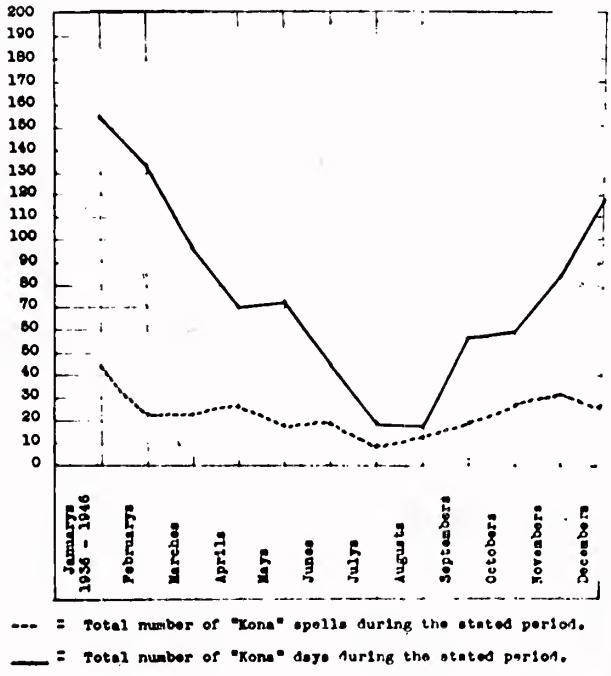


FIG. 1. Total number of "Kona days" and "Kona spells" occurring in Honolulu, January 1936 to January 1946.

The so-called Kona weather is the nearest thing, in Hawaii, to periodical or paroxysmal atmospheric disturbances. Most of the Kona spells are characterized by *southerly wind of low velocity*. and relatively *high humidity*. Petersen has studied the "Kona" spells and finds them unrelated to the lunar cycle. Barometric pressures vary but slightly in and out of Kona periods. Temperatures vary little or not at all. Time after time, it is noticed that the populace complains of the "heat" and is reassured by the newspapers that the thermometer registers no changes but that the humidity is high, and the wind velocity low.

"Kona" weather occurs mostly between the months of September and May. A "spell" of it may last from a few hours to a few weeks. In general, the main factors involved are a switch from trade winds, which are northerly and easterly, to southerly wind of lessened velocity and accompanied by increase in humidity. Barometric changes are so slight as not to seem to play much part in the picture.

The accompanying graphs show the number of Kona spells and Kona days reported by the Weather Bureau in Honolulu from February,

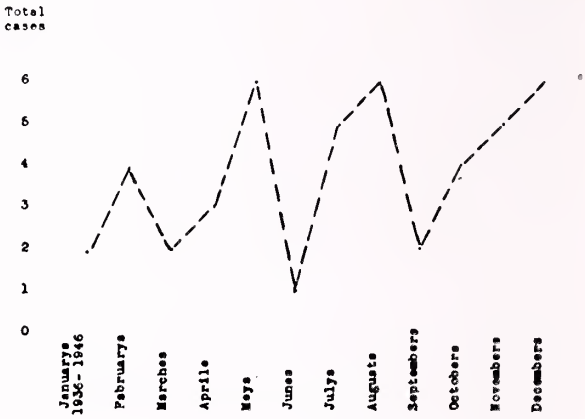


FIG. 2. Total number of cases of eclampsia with convulsions occurring in Honolulu in each month, 1936 to 1946. The four annual maximums and four annual minimums suggest a correlation with weather changes which may be explored at a later date.

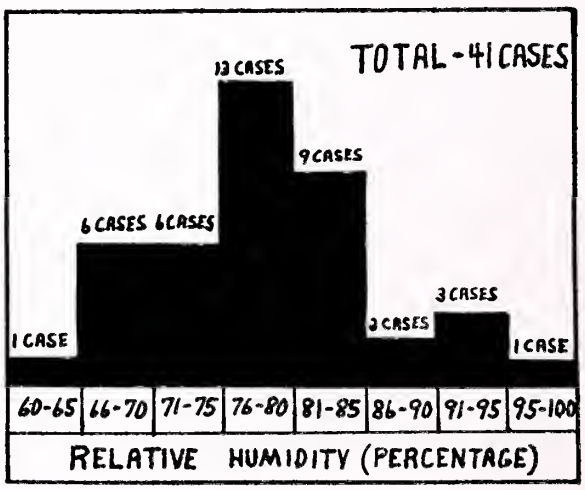


FIG. 3. Relation of 44 cases of eclampsia with convulsions to average relative humidity on the day of onset, 1936–1946. This curve approximates the expected one, so that no direct correlation is indicated.

1936, to January, 1946, and the total cases of eclampsia with convulsions seen each month.

It will be seen that there is a rough relationship between the number of "Kona" spells and the number of "Kona" days. In evaluating the figures, it must be remembered that the Kona spells vary greatly in length; hence, the apparent discrepancy such as in the months of April with 26 Kona spells and 70 Kona days, and December with 27 Kona spells and 116 Kona days, over a ten-year period.

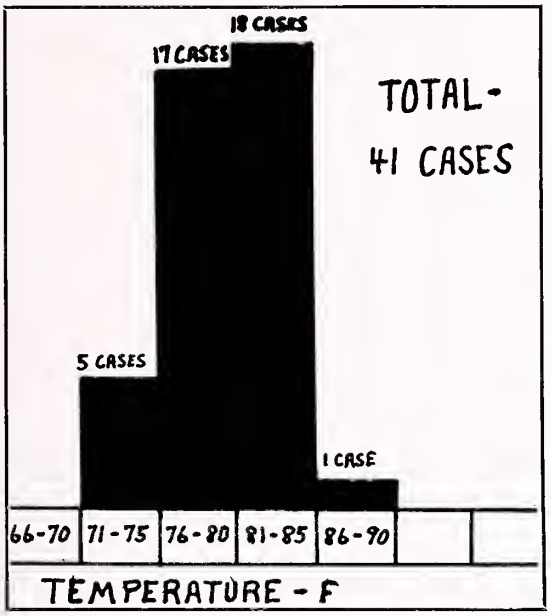


FIG. 4. Relation of 44 cases of eclampsia with convulsions to average temperature on the day of onset, 1936–1946. This curve approximates the expected one, so that no direct correlation is indicated.

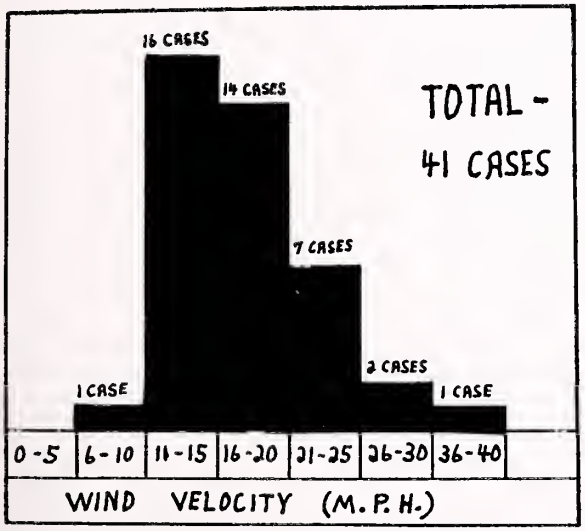


FIG. 5. Average wind velocity on day of onset of 44 cases of eclampsia with convulsions. A comparison with actual wind data indicates that 37 per cent of days have a wind velocity below 15 m.p.h., and the chart shows that 17, or 41 per cent, of cases occurred in association with a wind velocity below 15 m.p.h. Thus no direct correlation can be established.

Relation of Kona Weather to Eclampsia

It has been difficult to know just how to correlate Kona weather with eclamptic convulsions. It was felt that if such a convulsion occurred on the day of onset of Kona weather or within a day or two, the weather probably exerted an influence on the disease. Accordingly, this arbitrary figure was used due to lack of any precedent that we could find. The following observations have been made in 44 cases of eclampsia with convulsions occurring between February 1, 1936, and September 31, 1947. Correlated weather data were not available in 8 other cases.

Sapeika, of Cape Town, would throw out of such a list all but those presenting antepartum convulsions, as he feels that treatment, whether medical or operative, may influence eclampsia. Our list has been divided into antepartum, and intra- and post-partum, cases.

The following graphs correlate the incidence of eclamptic convulsions in Honolulu in 44 cases where weather details were available. The graphs correlate the average relative humidity, average temperature, and average wind velocity (for all wind directions). For wind velocity, it has been ascertained that this distribution curve is virtually the same as the normal one. The other curves have not been compared in this way but their appearance suggests that the same is true of them.

TABLE 1. *Relationship of day of onset of eclampsia to days of Kona weather.*

MONTHS (10 EA.)	AVERAGE NO. OF KONA DAYS	PER CENT OF KONA DAYS	EXPECTED COINCIDENCE OF ECLAMPSIA DAYS AND KONA DAYS	ACTUAL COINCIDENCE OF ECLAMPSIA DAYS AND KONA DAYS		
				On the Day	*1 Day Late*	*2 Days Late*
Januarys	15	50	2	0	0	1
Februarys	13	43	2	0	1	0
Marches	10	33	1.6	0	0	1
Aprils	7	23	1	0	0	1
Mays	7	23	1	1	0	0
Junes	4	12	0.5	0	0	0
Julys	2	7	0.3	0	1	0
Augusts	2	7	0.3	0	0	0
Septembers	6	20	0.8	0	0	0
Octobers	6	20	0.8	0	0	1
Novembers	8	24	1	1	0	0
Decembers	12	40	2	1	0	0
TOTAL			13.3	3	2	4

Table 1 shows the average number of Kona days in each month and the expected *chance* occurrence of one of the average number (4) of

cases of eclampsia on one of such days, and compares this with the *actual* occurrence. It will be seen that cases occurred *on* a Kona day only about one-fourth as often as chance would have led us to expect. Even allowing a one-day or two-day lag increases this fraction to only about one-half and three-fourths as often, respectively. Thus no tendency of eclampsia to occur on Kona days seems indicated; indeed, there is suggested a reverse tendency, though this is probably not statistically significant.

Summary

The close association between health and weather conditions has been recognized since ancient times.

The semitropic Hawaiian archipelago is not subject to violent atmospheric disturbances.

Kona weather is the nearest approach to spells of unfavorable weather in Hawaii. It is characterized by a reversal of the wind direction from northeasterly to southwesterly; high humidity; and usually low wind velocity.

Coincidentally with this advent of "Kona" weather, exacerbations of various types of disease processes are commonly believed to occur.

Most Kona weather days occur between the months of September and May.

Forty-four cases of eclampsia with convulsions occurred in Honolulu hospitals between February, 1936, and September, 1947.

Only nine of the eclamptic convulsions occurred within two days following the onset of the type of atmospheric disturbance known in Hawaii as Kona weather.

A review of hospital records on the three larger obstetrical services in Honolulu places the incidence of true eclampsia at approximately one case in 1,000 admissions, or 0.1 per cent.

Conclusions

The number comprising the foregoing series is too small to be of any great value but inasmuch as no attempts have heretofore been made to correlate weather conditions with eclampsia in Hawaii, it is to be hoped that it may be of some value in leading to further studies.

There is a long-established and widely held belief, in which I have shared, that eclampsia in Hawaii tends to occur during or shortly after periods of Kona weather.

The limited amount of available evidence, subjected to simple statistical treatment, does not indicate that this is the case.

The author is indebted to Doctors W. F. Petersen and E. A. Fennel for their advice and help in making this study.

881 South Hotel Street.

Discussion

DR. E. A. FENNEL: Everybody talks about the weather—and bellyaches about Kona weather—but almost no one in Hawaii has done anything about it except Dr. Bowles and, twenty-one years ago, Dr. Maurice Gordon (Gordon, M.: Atmospheric Changes and Tuberculous Hemoptysis, Trans. Ann. Meet., Hawaii Terr. Med. Assn., May, 1927).

Of course, Dr. Bowles' series is too small to have statistical value—any Ph.D. on the fringe of medicine, with a slide rule and a pocket full of correlation coefficients, could make Dr. Bowles' observations look fallacious. But Hippocrates needed no slide rule nor statistics, and yet many of his observations are valid to this day.

Our Hawaiian weather is our greatest natural resource. If it were not for our peculiar type of weather we would have neither sugar cane nor pineapple nor tourists. If it were not for our weather we might have as much chilblains, rheumatic disease and pulmonary thrombosis as does Chicago.

Dr. Bowles has emphasized the fact that Hawaii is an ideal laboratory for the study of the effect of the Weather on the Patient, inasmuch as, with us, temperature fluctuations are so minimal that they may safely be disregarded clinically. The same holds good even more emphatically for barometric changes. Storms, violent and sudden temperature fluctuations, and barometric changes have little or no effect on our population. That population, well or sick, lives normally where it is available to the weather, indoors or outdoors. Closed windows, storm doors, roaring furnaces, artificial humidifiers and electric fans are rare. The patient or the potential patient is subject to the effects of the weather twenty-four hours of the day, not interfered with by man-made efforts save for the variable clothes the patient wears—and we have 500,000 guinea pigs.

I am afraid that we have not realized fully how important to us and our patients are the four factors of our weather:

(1) Temperature, unimportant in itself, with its narrow fluctuations between 70° and 80°, but magnified in importance by other factors, notably absolute humidity.

(2) Relative humidity. Generally, in most Hawaiian areas, it is high, as compared with the mainland. (Many humidimeters made to sell on the mainland are not calibrated for Hawaiian humidity.) There are wide fluctuations in our humidity, not only on a diurnal basis but also at sporadic intervals and on a regional basis. This is the most important factor to us, as Gordon showed. In 1926 he studied all the factors that go to make the meteorograph and concluded that relative humidity was the most important factor of the weather connected with pulmonary hemorrhage. He concluded that a relative humidity below 70 per cent was advantageous and that that above was disadvantageous. The study covered a year. When only one patient on any one day had hemoptysis he called it a "single." There were 90 such, 44 per cent occurring at humidity below 70 per cent and 56 per cent occurring at above. Two patients with hemorrhage on the same day he called "doubles." There were 80 such events, 20 per cent at humidity below 70 per cent and 80 per cent at above. There were 50 "triples"; *none* occurred when the humidity was below 70 per cent; *all* of them occurred at above 70 per cent humidity. (That gives

one to think.) Humidity is, of course, the most important physiologic factor in our Kona weather.

(3) Wind direction. When the wind blows from the north or the northeast or the northwest there is generally, in our population, a sense of well-being. But if the wind be from the west or east, there is uneasiness and if the wind is from the southwest or southeast, the average patient complains. But when the wind is from the south, even the most rabid Honolulutics curse the climate.

Just why this fact of common knowledge, long observed, is true, remains a mystery to me. I presume that until it is found that wind direction has a direct bearing in the yield of sugar cane or pineapples, it will continue to be a mystery to me and medical others.

(4) Wind velocity. This I consider very important. You have all observed the mentally depressing effect of a wind velocity ranging between zero and five miles per hour. Surely that must be reflected in the over-all physiology. You have noted the mildly stimulating effects of a wind of five to fifteen miles per hour, particularly on the naked skin, and the briskly stimulating effects of wind of a higher velocity. Years ago Dr. K. P. Jones, then in charge of Kula Sanatorium, started an interesting experiment; many of his patients were subjected to wind baths of graduated lengths on graduated areas of bare skin. Unhappily, the experiment was discontinued when he left the Territory. It would bear repetition.

It is suggested that a study of the precipitation of psychotic episodes at our Territorial Hospital, in conjunction with humidity and wind direction and velocity might be interesting and practical. Such a study with regard to individual asthmatics would make practical the decision for or against the installation of an expensive weather conditioner.

A short postscript on behalf of the sun. "Glorious sunshiny weather" certainly has its effects on the psychology of our patient and probably on his physiology as well. Sunless days so often coincide with Kona weather, that the value of the individual factors becomes confused. The balance between sunshine and clouds may have an important bearing on the ionization of our atmosphere and that may have an important bearing on our physiology.

I wish that each of our hospitals had at least one room in which temperature, humidity and air flow could be regulated, not only for the pre-eclamptic cases but for other cases under study as well; asthma, vascular accidents, insanity and so forth. That should not cost too much.

But more strongly do I wish that each of our hospitals were little weather stations, recording, at three-hour intervals, or continuously, temperature, relative humidity, wind direction and wind velocity. The weather, at the same time, on the Federal Building and at St. Francis Hospital, might be somewhat different. It certainly would be different at Kula Sanatorium or at Hilo Memorial. Interns, residents, Board aspirants and even staff members might find these data of interest in studying their cases and learn to anticipate others.

I think the nucleus of these many weather factors in disease or health is relative anoxemia. The transfer of oxygen from the atmosphere to the serum and red blood cells and from the serum and red blood cells to the cell is the realm in which weather affects us most.

But whether that important oxygen is ozone or oxygen or one of the higher polymers of oxygen is unknown; Hawaii, with a minimum of extraneous factors, would be an ideal laboratory for that investigation. How interesting it would be to know the O_1 or the O_6 content of the soft, wet "sick wind" we call Kona. And what of the ionization at that time? I hope that that problem will some day appeal to one of the graduate students at our University.

For many years I have watched conscientious surgeons and internists analyze the results of their year's work—with never a thought to the weather that preceded and followed the operation, the anesthetic death, the unexpected outcome, the coronary occlusion or the cerebral hemorrhage.

If each hospital had its own daily weather chart, these physicians might find some interesting—possibly startling—data.

After all, old Hippocrates was a pretty good "doc."

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ANNOUNCEMENT

TO ALL DOCTORS

All members of the Hawaii Medical Service Association under the old A, B, C, D and E Plans (except the Pineapple Plan) have been converted to the new coverage under Plans I, II and III as outlined in your *Office Manual for HMSA Physicians* which we sent you three months ago. Therefore, any service rendered HMSA members by your office *after December 31, 1948* should be billed in accordance with the new membership. Please refer to your Office Manual which outlines the procedure.

HAWAII MEDICAL SERVICE ASSOCIATION

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[EDITORIALS]

BRITISH DOCTORS LOOK AT SOCIALIZED MEDICINE

Letters to the Editor of the *British Medical Journal* highlight certain aspects of the new National Health Service. The following excerpts are from letters that have appeared in recent issues:

Before we acquire a new set of reflexes and learn to kowtow three times as each new regulation drops on our breakfast tables, cannot we decide just where we stand over one or two simple issues? . . . Who are we to say that the appendicitis of a beer-sodden tramp is as important as that of an F.R.S. [Fellow of the Royal Society]? A decent society pays more money to its most valuable citizens precisely that, when they are ill, they can pay for privacy, medical priority, extra care, and comfort . . . Again, is a doctor's duty to his patients or to the administrative machine? Are we to see that Bill Jones gets well or that he gets his sick pay? . . .

. . . Failure is bound to come if doctors' lists are not limited to 2,500 patients per doctor . . . if doctors are going to give their best they must be adequately recompensed, and the proposed capitation fee falls miserably short in this respect . . . there are legion with panels of only 1,200 or so bringing in an income of about £1,150 gross—i.e., about £750 net and a pension of £2 or £3 per week if they stay the course until they are 65, and on call 24 hours a day for 7 days a week. Is this social security? This will not do, and the sooner we make it clear to Mr. Aneurin Bevan and Co. the better, even if we have to form a trade union . . .

The foregoing is of particular interest in the light of the fact that the total professional incomes of general practitioners in England, Wales and Scotland added together formerly came to about £28 million, and that under the N.H.S. Acts they add up to about £45 million! This amounts to a capitation fee of 18s. per year on 45 million persons, or 95 per cent of the total population. An increase of this fee to 30s. has been recommended, and another writer says:

. . . the B.M.A. would be fully justified in going in for a 40s. capitation fee . . .

And another writer sees the handwriting on the wall:

. . . I feel sure that as time goes on more and more doctors will reach the conclusion that the only way to achieve a National Health Service is by the introduction of a salaried service with the doctors working in coöperation instead of competition. We have chased away this bogy of a salaried service to find we retain all the disadvantages and expenses of private practice while losing its advantages . . .

. . . I am 30, qualified six years ago, and began medical training twelve years ago. After three years in the Services and with a wife and two children I now earn £650 in a Class III Government grant. Even with the most careful living and considerable self-denial I find that I must borrow a considerable sum each year to maintain this frugal existence for myself and my family. Since July 5 our plight is worse, as superannuation and national insurance take approximately another £3 a month . . .

But the Service is getting along in spite of these complaints, as other writers testify:

. . . We were told by our elders and betters that the Service was all but unworkable because of the lack of medical men. So far, however, the Service seems to manage fairly well and be economical in its requirements. The winter may tell a different story . . .

. . . I have always opposed the health service as it stands today, for I feel it can only lead to a gradual lowering of standards in general practice, but the lot of the G.P. is far far better than I dared hope it would be, and for this we have to thank the tenacity and leadership of our Association and Negotiating Committee.

And there is some confusion still:

. . . On the one hand we have the sponsors of the National Health Service warning the public not to expect the full benefits of the scheme just yet because of the grave shortage of doctors, nurses, health centres, etc., while on the other hand it is pretty obvious to those of us who are not hypocrites that newly established practitioners who joined the Service after the general rush to "sign on" with doctors are likely to be in for a lean time . . .

The Secretary of the British Medical Association begins his report in the November 27, 1948 issue of the *British Medical Journal* as follows:

"The defects of the Service are now becoming apparent. In general practice, with which this first report deals, evidence is accumulating that the burden of work, particularly paper work, has greatly increased; that in many cases income has gone down; that private practice is much less than was anticipated and in many areas has virtually disappeared; that there are doubts abroad whether the Spens Committee's recommendations are being fully applied; that the basic salary arrangements are resented by some and disliked by many."

The whole picture, of a profession beset by doubts and fears, bombarded with restrictive regulations, and distracted from their proper interests, suggests that the patients' best interests are being by-passed in many respects, and that the doctors are not very happy about their own lot. There's food for thought in it; let's hope our "do-gooders" will dine heartily.

THE HARGRAVES "L.E. CELL"

R. J. Morton described in a thesis written at the University of Minnesota in 1947 [1] a singular cell observed in the bone marrow in cases of disseminated lupus erythematosus. These observations were extended in a paper published in January, 1948, by Hargraves, Richmond and Morton, from the Mayo Clinic.[2] Haserick and Sundberg of the Cleveland Clinic have recently confirmed these reports,[3] and it appears that a definite diagnostic aid is now available for use in suspected cases of disseminated lupus erythematosus.

The "Hargraves cell," which was found by Morton in 7 of 11 cases of disseminated lupus erythematosus, and was found in 4 out of 5 cases of this disease by Haserick and Sundberg, is a polymorphonuclear leucocyte which has ingested a spherical, basophilic, homogeneous mass which has a smoky or foggy appearance. It does not have the mature nuclear pattern which characterizes the bodies engulfed by so-called "tart" cells; the latter are not rare in bone marrow smears generally.

Haserick and Sundberg failed to find these cells in 3 cases of dermatomyositis, several cases of discoid lupus erythematosus, and numerous cases characterized by leucopenia. It appears that these cells may already be regarded as providing some evidence in favor of a diagnosis of lupus erythematosus disseminatus; certainly no report of a doubtful case of this disorder can be regarded as complete without bone-marrow smears, at any rate.

FEDERAL AID IN CHILD LIFE RESEARCH

An undated release from the Children's Bureau of the Social Security Administration of the Federal Security Agency of the United States Government reports that the Bureau has recently had established in it a "clearinghouse for child life research." Either this new clearinghouse is an unnecessary frill, in which case it is just one more device through which to divert tax funds into the pockets of our seemingly ever-growing Federal Government, or it is needed, in which case it is too bad the people who needed it couldn't have established it and financed it themselves.

They probably feel, however, that it is a great thing that the Federal Government is doing it "for free." This is one of the pernicious things about the incomprehensibly enormous gap between the money you pay to the government and the services you get in return: they're so far apart that you finally forget that if you weren't getting all those "services" you wouldn't have to pay in all that money. It gets to seeming as if the services didn't really cost anything, since you don't seem to be paying any more money after the new services are added—except for higher taxes, which you expected any way—than you did before.

It's like beer out of somebody else's refrigerator: it cost around thirty cents a can, but it doesn't seem as if it cost a darn thing!

X-RAYS AND SKIN CANCER

The following letter from Frank E. Adair to Dr. Mahlon Ashford was published in the October, 1948 issue of the *Bulletin of the New York Academy of Medicine.*

New York, September 14, 1948.

Dr. Mahlon Ashford
The New York Academy of Medicine
Dear Doctor Ashford:

It has come to my attention that there is the possibility of misinterpretation of two statements in my article on the "Prophylaxis of Cancer" read before the 19th Graduate Fortnight of The New York Academy

[1] Morton, R. J.: A Study of the Blood and Bone Marrow in Cases of Disseminated Lupus Erythematosus. Thesis, University of Minnesota, February, 1947. Cited by Haserick.[3]

[2] Hargraves, M. M.; Richmond, Helen, and Morton, R. L.: Presentation of Two Bone Marrow Elements: the "Tart" Cell and the "L.E." cell, Proc. Staff. Meet., Mayo Clinic, 23:25 (Jan. 21), 1948.

[3] Haserick, J. R., and Sundberg, R. Dorothy: The Bone Marrow as a Diagnostic Aid in Acute Disseminated Lupus Erythematosus, J. Invest. Derm. 11:209 (Sept.), 1948.

of Medicine, October 18, 1946 and as published in the *Bulletin* of The New York Academy of Medicine in July, 1947. I wish to modify these statements and hope it will make my meaning crystal clear.

The first statement appearing on page 385 of the *Bulletin* reads as follows:

> "The removal of all precancerous lesions of the skin will save many a life from cancer, as skin cancer is the easiest of all types to cure."

Please substitute the following as more clearly conveying my meaning:

> **"The early and proper treatment of malignant or suspicious skin lesions will save many lives, for skin cancer offers the greatest opportunity for cure."**

The second statement I would like to modify appeared on page 386 of the *Bulletin* and reads as follows:

> "Any one who has ever had even a single dose of low voltage x-ray to the skin is a possible candidate for subsequent skin cancer."

For this statement I wish to substitute the following:

> **"Under certain conditions and dosage, x-ray to the skin can produce skin cancer. Therefore this ray should never be used except by experts in this form of treatment. Well trained dermatologists using x-ray in the treatment of skin diseases are experts in this form of therapy."**

In order that there may be no misunderstandings of my meanings, I would appreciate it if this letter be given publication in the *Bulletin* of The New York Academy of Medicine.

FRANK E. ADAIR, M.D.

* * *

PROGRESS REPORT ON CANCER MORBIDITY PROJECT

About one year ago, plans were started for a cancer morbidity study in Hawaii through hospital records. Valuable guidance and assistance were given by the Cancer Committee of the Hawaii Territorial Medical Association. All county medical societies were contacted and all approved of the project after some discussion and helpful suggestions. The Hospital Association of Hawaii expressed considerable interest in the proposed study and their cooperation and support were assured. The assistance of this group has been greatly appreciated. The Medical Record Librarians have given valuable assistance in working out a report form to be used for abstracting information from hospital records. The cooperation and assistance of this group has also been greatly appreciated.

A little over six months ago the morbidity study was actually started. It is sponsored by the Hawaii Territorial Medical Association, the Hawaii Cancer Society and the Territorial Department of Health. Two physicians were placed in charge of the project. A statistics clerk and a stenographer have been engaged in abstracting information from the hospital records and they have also worked out a plan for putting the information on statistical punch cards so that it may be summarized from time to time with the least difficulty. The salaries of these two employees have been covered by a special cancer grant from the USPHS to the Territorial Health Department.

All information obtained from records in this study is kept confidential as to identity of patient or physician. However, summaries of the types of tumors, diagnostic procedures and treatment methods may be obtained by interested physicians when special studies are to be made. Summaries of data obtained through the study will be released from time to time by the physicians in charge. Every record used in this study will be reviewed by one of the supervising physicians before being included in the study in order that accuracy of information may be assured.

Up to December 1, 1948, 566 hospital records had been reviewed. Four hundred and thirty-six of these were found acceptable for inclusion in the study. Thirty-four records have been placed in the pending file since they are ones on which further information can probably be obtained. In other words, 470, or 83 per cent of the records are virtually acceptable. Ninety-six records have been placed in the questionable file because of lack of information to substantiate the diagnosis. However, many of these records will be made acceptable by additional information from other hospital records. It is common to find that patients have been admitted to three hospitals, and it is often necessary to obtain information from all of these hospital records before getting a complete picture. In general, the hospital records thus far have been good.

In the present study we are going back five years in reviewing the records. We hope to keep the study current and go forward if possible. Over a long period this type of morbidity study should furnish information of value to all physicians in the follow-up of tumor cases, as well as in furnishing information on the tendency of benign tumors to become malignant, and should supply leads for tumor therapy and research.

I. L. TILDEN, M.D.
W. B. QUISENBERRY, M.D.

POST-GRADUATE LECTURE SERIES, 1948

I. TUMORS* OF THE ALIMENTARY TRACT

PAUL KLEMPERER, M.D. §

Before we start with the discussion of the tumors of the alimentary tract I would like to say a few words regarding classification in general. Classifications can be made according to several points of view, and consequently there are certain categories. One can classify tumors according to their site within the affected organ; this is particularly appropriate for the roentgenologist and for the surgeon, especially for the stomach. It is obvious that a tumor in the cardia and one in the pylorus will be of different significance. In former years when surgery was not advanced enough to permit approach to the carcinoma high up in the cardia, it was quite obvious that exact localization was of major importance and therefore the classification according to site was of particular value. One can also classify tumors according to their gross appearance. Pathologists in general classify neoplasms according to gross appearance and consistency as well as according to histology and histogenesis.

Principally we classify all tumors into two groups: namely benign and malignant, and then by and large into epithelial and non-epithelial neoplasms. This is true of tumors in general, and particularly of those of the alimentary tract, which combines epithelial structures forming the mucosa and non-epithelial tissues forming the rest of the wall. Tumors originate from either of these constituents.

Stomach

Tumors of the stomach are as you know extremely frequent. One can say that about 25 per cent of the malignant tumors of the body are localized within the stomach. Carcinoma of the stomach is of particular importance. The frequency of malignant tumors in the stomach is so great that while 98 per cent of the malignancies are carcinomata, and only 2 per cent are non-carcinomata, the sarcoma is nevertheless not rare.

Non-malignant Epithelial Tumors

I would like to present first the gross features of neoplasms of the stomach and I start with the non-malignant epithelial tumors. These tumors of the stomach are commonly designated as polypi, but we should rather refer to them as *polypoid adenomas*. They are not infrequently multiple. Polypoid adenoma of the stomach is by no means as frequent as in the colon; therefore a consideration of polypi will not be as significant as those of the colon, and particularly the question of possible transformation of polypi into carcinoma is not of so great importance for the stomach as for the colon.

The final differential diagnosis between polypoid adenoma and adenocarcinoma can only be made on histologic examination. This large tumor,† for instance, was not malignant. It was recognized clinically because of its location proximal to the pylorus. It is a pedunculated tumor which could fall into the pylorus and produce symptoms of obstruction. Here we have a rather large polypoid tumor with a pedicle; this tumor shows areas of ulceration. Whenever we find ulceration (and this holds for the stomach as well as for the colon) we must be suspicious and examine such areas histologically with particular care. This tumor, for instance, showed areas without malignant features, while the ulcerated portion was definitely malignant. I shall discuss the question of prognosis in these tumors again when I come to the colon.

It might be stated here that whenever one has such a pedunculated tumor, particular attention must be paid to the pedicle, because it is infiltration by carcinomatous cells of the pedicle which influences the progress of the disease and changes therefore the choice of the surgical procedure.

Occasionally one sees multiple polypi. How extensive a polyposis of the stomach may become is illustrated by the next picture, in which you see some isolated polypi, while the main part of the tumor is a diffuse plaque-like tumor, which reflects however still the appearance of polyposis. In the large intestine you quite frequently encounter this type of polypoid growth of a flat nature resembling somewhat a flower-bed—the Germans applied the term *Rasenpolyp*. This type of tumor is not very common in the stomach.

Malignant Epithelial Tumors: Carcinoma

If we turn to the carcinomas we may again repeat that localization of the neoplasms plays a very important role. Here is a relatively small flat tumor which was quite soft on palpation, and was localized in the cardia. Tumors of the cardia are frequently lumped together with tumors of the fundal pouch of the stomach. The frequency of carcinoma in this location is not very high. About 8 per cent of carcinomata of the stomach observed at autopsy were localized in this region, either in the cardia or in the fundal pouch. It must be stated that in our statistical evaluation we used only autopsy material because surgical material is already selected and therefore statistical figures are not valid. In some instances it becomes difficult to decide where the tumor actually originated. A tumor of the upper part of the stomach frequently infiltrates into the esophagus.

Here I should like to add a few words regarding biopsy diagnosis. As a rule it is not difficult to distinguish microscopically between the carcinomata of the esophagus infiltrating into the stomach and the gastric carcinoma infiltrating into the esophagus, because the esophagus shows squamous cell carcinoma while the gastric carcinoma is practically always of a glandular type. It is, however, not always simple to make the distinction on biopsy, and it is of importance to make the

* "Tumor" is used throughout in its newer and restricted sense of "neoplasm."—Ed.

§ Pathologist to Mount Sinai Hospital and Professor of Pathology, Columbia University, New York City.

Transcript of lecture given before the Honolulu County Medical Society, May 11, 1948.

† References such as this refer to lantern slides with which the lecture was illustrated.

differentiation because a choice of operation depends, as I understand it, on whether tumor originates in the stomach or in the esophagus. Sometimes one is considerably puzzled because an immature carcinoma of the esophagus may resemble cytologically the immature carcinoma of the stomach.

Now we come to the carcinoma of the stomach localized within what one might call the corpus of the stomach. One can divide the stomach into two portions: the fundus and the antrum. This division does not reflect the gross but the histologic appearance of the mucosa. The fundus of the stomach is that part which has a mucosa which is formed by secretory glands. It is the actually functioning, secreting part of the stomach; while the other portion, the antrum, including the pylorus, does not contain the characteristic secreting cells, the peptic and acid cells, but is formed by elements which secrete mucus; this is the motor part of the stomach. The fundal portion includes the fundal pouch, the anterior and posterior walls, and the greater curvature. Now the most frequent localization of carcinomata in this portion is either the anterior or posterior wall and the greater curvature, only occasionally on the lesser curvature, high up. The huge tumors, of which you see here an example, are localized mainly on either the anterior or posterior wall of the stomach. This is one of the rather unusual types of carcinoma in which you see a very large tumor, but it is not a typical cauliflower carcinoma such as you will see in the next specimen. It is smooth on the surface and shows deep furrows which give to the tumor a resemblance to an artichoke, in contrast to the more common cauliflower types. The significant feature of this and the next tumor is that such neoplasms, while sometimes very large, are well demarcated, and rarely show infiltration into the vicinity which is so characteristic for the great number of gastric carcinoma. Moreover, it is this type of carcinoma which is frequently free of metastasis. This is quite remarkable if the tumor is very large and shows necrosis and destruction on the surface. Even on microscopic examination one need not find invasion of the adjacent normal mucosa. However, one should not be too sanguine about these tumors although a follow-up of patients after gastric resection for carcinoma shows that the cauliflower types have the best prognosis. All the other tumors give unfortunately a rather bad prognosis. Carcinoma of the stomach is so treacherous that one can never guarantee that there will not be a recurrence even after wide resections.

Scirrhous Carcinoma

Now we come to other forms of carcinoma. This picture shows a flat carcinoma which is rather firm. If we apply the criterion of consistence for our classification the previous tumor would have been called medullary, the opposite to which is the hard or scirrhous carcinoma. We see in this specimen that one cannot be quite sure on mere palpation how far the tumor extends. It is evident that this tumor was resected rather close to its edge and the danger of recurrence is great. We must always examine very carefully the edges of the resected portion of the stomach to see whether they are invaded by tumor. In a case like this it had to be reported that the resection was carried through tumor tissue.

A characteristic appearance of carcinoma of the stomach is shown in the next slide. I commonly refer to it as a saucer-shaped type of carcinoma. It shows elevated edges and the carcinoma infiltrates into and undermines the adjacent mucosa so that it seems as if it is normal; nevertheless carcinoma extends quite widely into the vicinity. However, this type is not as treacherous in its progress as the next group.

This is a relatively small infiltrating scirrhous carcinoma situated at the pylorus and producing a stenosis. It is obvious that such a tumor in this location will cause early symptoms and frequently very small carcinomata in this site come to early resection. On the other hand, not every carcinoma in this location of the antrum will necessarily produce symptoms of stenosis. This is illustrated by the next slide which shows a flat diffusely infiltrating carcinoma of the pylorus. It was found at post mortem examination of a patient who had no gastric symptoms and the discovery of carcinoma at autopsy was a surprise for the clinician. What I would like to point out in the next slide is that the tumor extends far beyond its obvious site. On histologic examination we found tumor cells far away from the tumor in areas which seemed to be perfectly normal. This insidious infiltration and advance of the carcinoma is characteristic for the infiltrating scirrhous carcinoma. In the further advance of these tumors the entire stomach may become infiltrated and one cannot see the origin of the carcinoma or the site of the original tumor. If you examine the cross section of the diffusely infiltrated stomach you notice a striking thickening of the wall, in which, however, the individual layers of the stomach can still be distinguished. The mucosa is markedly narrowed, one hardly sees more than a thin line on the surface; then comes a thick and white submucosa and then the muscularis in which one sees white striation. This is a diffuse scirrhous or fibro carcinoma of the stomach which represents the most advanced gastric carcinoma. In the course of this neoplastic infiltration the stomach shrinks in size. It becomes small and assumes the shape and size of a leather bottle.

A question of great importance for the surgeon at operation is how to recognize a carcinoma on the outside. He can recognize it by palpation, of course, especially the large tumor. However, an indurated chronic peptic ulcer may also feel like a hard mass. The tumor infiltration in the serosa which you see here as white or grayish criss-cross lines is always definite evidence of carcinoma; it denotes carcinoma infiltrating the serosal lymphatics. This picture shows an advanced stage but on close inspection one can recognize even minor infiltration of the serosa. The serosal surface of the stomach in peptic ulcer does not show these grayish lines. In contrast, it shows a flame-shaped appearance due to the injection of blood vessels.

Now we turn to this type of carcinoma, which is flat and ulcerated and suggests the possibility that one is dealing with a carcinoma which has originated in a peptic ulcer. The next slide shows such a case. On histologic examination, however, this was an ulcerated carcinoma which could be established according to the criteria which I will discuss shortly. A carcinoma may undergo peptic ulceration and then its appearance is quite similar to that of a peptic ulcer with carcinoma developing within its edge. In this picture we see at one edge a wide infiltration of carcinoma into the adjacent mucosa. This is not a carcinoma originating in an ulcer but an ulcerated adenocarcinoma of the stomach. For comparison I present here a chronic peptic ulcer, rather high up in the lesser curvature of the stomach. The edges of the ulcer are smooth, not firmly infiltrated, and whatever elevation you see is due only to inflammatory reaction. The statement has been made that an ulcer

exceeding a certain size is always carcinomatous. I cannot agree with this statement. I have seen peptic ulcers the size of my palm, which upon extensive and complete examination of practically every area of the circumference did not show neoplastic transformation. The size is therefore not a reliable criterion for the diagnosis ulcer carcinoma.

Carcinoma and Peptic Ulcer

What then are the criteria which suggest that a carcinoma originated in a chronic peptic ulcer? There have been statements in the literature in the past according to which the frequency of carcinoma originating in peptic ulcer was estimated at zero to one hundred per cent. Some of the authors maintained that carcinoma never originates in a chronic peptic ulcer while others went so far as to believe that practically every carcinoma has developed from a peptic ulcer, particularly those situated along the lesser curvature. We have therefore to be strict in establishing criteria to define which carcinomata should be considered as having originated in a chronic peptic ulcer. It is obvious that one can suspect a carcinoma only then if it is located in one of the sites of the stomach which is commonly the site of chronic peptic ulcer. Chronic peptic ulcer of the stomach is localized in more than 95 per cent along the lesser curvature, either saddling it or close to it in the anterior or posterior wall. Therefore, one can safely say that a carcinoma which is localized distant from this strategic area cannot have been a peptic ulcer. Now then, the next feature one has to request is that a carcinoma suspected of having been originally a chronic peptic ulcer must reflect in its appearance the anatomic gross characteristics of an ulcer. It must have in shape that peculiar ear-lobe appearance, which is so characteristic of the large chronic peptic ulcer. This criterion was first established by the French clinical pathologist, Hayem. It is then first, localization of the carcinoma, and second, its gross appearance, the shape of the ulcerated tumor, which gives us the right to suspect. If we are too sanguine we may suspect every one, and then it is obvious that we cannot come to any conclusion. It is furthermore plausible that the huge polypoid tumors of the stomach which are commonly situated in the anterior or posterior wall, or at the greater curvature of the stomach, are not of ulcer origin. The next point is that we know by experience that the greater number of carcinomata which can rightly be suspected as ulcer carcinomata are located in the prepyloric area of the stomach. Consequently any chronic peptic ulcer which is localized from half an inch to an inch proximal to the pylorus should be suspected and carefully examined for the presence of minute areas of carcinoma.

I would like to add here that one need not be so careful in regard to chronic peptic ulcer of the duodenum. I have never seen a carcinoma originating in a chronic peptic ulcer of the duodenum and I am supported by the statements of the literature.

Some years ago we became very much interested in the question of the criteria of the ulcer carcinoma. First of all we can definitely say that there is such an entity, a carcinoma which originated in a chronic peptic ulcer. When we saw a case of a chronic peptic ulcer which appeared typical on macroscopic examination but showed microscopically carcinoma in a small sector of the circumference we decided to investigate all the chronic peptic ulcers of the stomach which were received in the laboratory. Dr. Samuel Klein organized the investigation in such a way that he took sections, cut across the entire ulcer. By this method we tried to cover the ulcer completely. Of course, one cannot make serial sections of an ulcer which may be of a diameter of an inch and even more, but one can take blocks which include the entire ulcer and then section them so that one is sure one has covered in each of these slices at least a hundred micra. Then one can feel reasonably sure that one will not have missed an area of carcinoma. The method of investigation and conclusions regarding the problem of ulcer-carcinoma have been briefly reviewed by Dr. Sam Klein in the April number of the *Surgical Clinics of North America,* 1947.

Metastases

The next question I would like to discuss relates to certain peculiarities of metastases in carcinoma of the stomach. Of course, carcinomata of the stomach metastasize in the usual way to regional lymph nodes, which are frequently affected, and next into the liver. But there are a few types of unusual metastases which I should like to present because they show clinical features which are of considerable interest.

I refer first to the carcinoma of the stomach metastasizing to the lung in a peculiar diffuse manner, involving mainly the lymphatics, so that a characteristic network can be seen upon the pleura at autopsy. If such pulmonary metastases are very extensive, the x-ray examination shows a characteristic picture. I present this case of a flat infiltrating carcinoma high up on the lesser curvature and invading into either wall of the stomach. Sometimes very small carcinomata of this kind may be the origin for extensive pulmonary infiltration, although they do not produce clinical symptoms pointing to a gastric neoplasm. On the next picture you see a grayish network running throughout the lung. On x-ray examination, I am told, this may resemble miliary tuberculosis, particularly if the hilar glands are not strikingly affected. Patients with this extensive lung involvement show symptoms of marked dyspnea and orthopnea and they sometimes develop right cardiac failure, which was evident in this particular case; the right ventricle shows some degree of hypertrophy. Due to the diffuse infiltration of the lung, the smaller branches of the pulmonary artery become narrowed by carcinomatous infiltration. You may speak of carcinomatous endarteritis; this produces obstruction to the blood flow and therefore hypertension of the pulmonary circulation. Thus the rapidly advancing embarrassment of the pulmonary circulation may cause the death of these patients in right cardiac failure. The carcinoma cells reach the lungs by way of the thoracic duct, the duct draining into the left subclavian vein and from here carcinoma cells are swept into the pulmonary artery and its branches. In addition, there is extension via lymphatics, and carcinoma cells are also accumulated within the perivascular and peribronchial lymph spaces. It is a peculiar experience that this type of pulmonary infiltration is most commonly found in carcinoma of the stomach and particularly in young individuals. A series of such cases was published some fifteen years ago by Dr. Edward Greenspan of the Mount Sinai Hospital.

Another type of metatasis in which the skeleton becomes extensively invaded by carcinoma is of interest because it is associated with a peculiar clinical syndrome. Such cases show hemorrhagic diathesis, purpura of the

skin, and hemorrhages in internal organs. The blood picture in such patients is also frequently abnormal, thrombocytopenia being prominent. Moreover, these cases may also present a picture of primary blood dyscrasia showing immature white elements in the blood. I recall one observation which I published nearly thirty years ago in which the patient came to autopsy with the clinical diagnosis of acute leukemia.

Non-epithelial Tumors of the Stomach

We proceed now with the non-epithelial tumors of the stomach and I refer first to the rather frequent occurrence of small tumors in the wall of the stomach which are either *leiomyomata, fibromata, neuromata,* or *angiomata.* Macroscopic differentiation is not possible. We see these small tumors not infrequently at autopsy but they have of course no clinical significance. They become significant, however, if they are larger. These non-epithelial tumors bulge either on the serosal surface of the stomach—we speak of those as exogastric—or they protrude on the mucosal aspect as endogastric tumors. Practically all these endogastric tumors, which histologically are composed of either smooth muscle cells, fibroblasts, sometimes cells of Schwann's sheaths, show a superficial ulceration on the mucosal surface from which profuse bleeding may occur. The sarcomatous types, and particularly the exogastric tumors, may grow to tremendous sizes. During their slow growth they often undergo cystic degeneration. One of the tumors of this type, the size of a man's head, was resected and the patient lived for years in perfect health.

This and other experiences indicate that the non-epithelial tumors, even if they are sarcomatous, are relatively benign. However, again one must be cautious in the prognosis. In the next picture I demonstrate an ulcerated tumor which metastasized to the liver; the microscopic appearance is that of a very cellular *myosarcoma* of the type found commonly in the uterus. It can be added here that identical observations obtained in tumors of this type originating in the intestines. Fifty per cent of the non-epithelial tumors belong to the group mentioned so far.

The other half is formed by *lymphosarcoma,* neoplasms originating in the lymphatic tissue. On the serosal surface these tumors can hardly be distinguished from carcinoma. The involvement of the lymph nodes in these cases is of particularly significance because in the case of lymphosarcoma of the stomach we are confronted with the problem whether the gastric involvement is part of a systemic lymphosarcomatosis or whether it is a neoplasm restricted to the stomach. The differentiation is difficult for the surgeon; but I would say that whenever one encounters at the operating table a tumor with extensive lymph node involvement, which on subsequent examination proves to be lymphosarcoma, one is dealing with generalized lymphosarcomatosis. Obviously, in such instances gastric resection is inadequate and the patient must be treated with radiation therapy.

The gross diagnosis of gastric lymphosarcoma, and particularly the differential diagnosis from carcinoma, is not simple. A certain feature can, however, be pointed out. First, the infiltration is very diffuse throughout the wall and there is no evidence of fibrosis. It is, as you see in this picture, a diffuse white and rather soft tumor involvement. In the second place you see that the tumor progresses along the mucosal folds so that they become giant folds. This is particularly evident in the next picture, in which one sees a peculiar pattern of these giant folds resembling the gyrations of the brain.

Small Intestines

Tumors of the small intestines are not very frequent and we can say that *carcinoma* of the small intestine is particularly rare. The most frequent site of carcinomata of the small intestine is in the duodenum. They are either polypoid tumors at the papilla of Vater or flat tumors which may include the papilla but originate either proximally or distally from it. The remainder of the small intestine, the jejunum or ileum, is rarely the site of carcinoma. In fact, they are so unusual that some pathologists refused to accept any epithelial tumor of the small intestine as ordinary carcinoma. They stated that all the epithelial tumors in the small intestine belong to the group of *argentaffine tumors.* They occur sometimes singly, frequently they are multiple in the small intestines. They are observed in every part of the alimentary tract, particularly frequently in the appendix, but a few cases have even been reported in the stomach. These argentaffine tumors, or *carcinoids* as they also have been called, seldom grow to sizes larger than a hazelnut. If they do, they cause symptoms of obstruction, particularly if they are localized at the ileo-cecal junction.

I proceed now to show you a few of the *non-epithelial tumors.* They are identical in their type with those in the stomach. They bulge either into the lumen or protrude on the serosal surface. Occasionally we see cyst formation and there is frequent hemorrhage into the tumor. Sometimes these neoplasms give rise to intussusception. These tumors may prove to be very malignant. I show here a malignant *myosarcoma* of the small intestine with metastasis to the lung. *Lymphosarcoma* of the small and large intestine is not uncommon. A characteristic feature of lymphosarcoma of the intestine is that the lumen of the affected loop is dilated, contrast to the stricture usually caused by malignant tumors, especially by carcinoma. This is due to the fact that the wall of the intestine is diffusely infiltrated by lymphosarcoma cells without connective tissue proliferation. In cases in which one sees multiple lesions one must suspect that the intestinal involvement is part of a generalized lymphosarcomatosis. I should like to mention in addition the occurrence of *metastatic carcinoma* within the wall of the small and large intestine. Bronchus carcinomas not rarely metastasize to the intestine and may even cause single metastasis. I have seen two cases of isolated metastatic *melanocarcinoma.*

Large Intestine

I proceed now with the tumors of the large intestine. *Lipomata* of the colon are frequently seen at autopsy. Sometimes such lipomata become very large and cause symptoms. I present here a resected superficially ulcerated lipoma which is obviously benign although the symptoms were those of hemorrhage and slight obstruction and the clinical and roentgen examination suggested the existence of a large polypoid tumor. The other non-epithelial tumors of the large intestine should be mentioned only briefly and require no further description because they are identical in every aspect to the types found in the stomach and small intestines. Of

great importance however, are the epithelial tumors.

Benign pedunculated or sessile *adenomata* occur in the large intestines with extreme frequency. They are commonly referred to as *polypi*. If one carefully looks for them in routine autopsy material one finds that they occur in 40 per cent of all the large intestines in the age group from 60 to 70. The distribution of these polypi is not the same as that of *carcinoma* of the colon. There is no preference for the left side of the large intestine, as is so obvious in carcinomas, of which we find 75 per cent on the left, and only 25 per cent on the right side.

The frequency and localization of polypi is of great importance for our subsequent consideration regarding the problem of carcinomatous transformation of these benign tumors. The occurrence of double and multiple carcinoma, which is not rare in the colon, has also contributed to the problem of the relationship between polyp and carcinoma. Furthermore, polypi are frequently found in the vicinity of the carcinoma. Such experiences account for the belief, widely held by surgeons, that carcinomata originate with singular frequency from polypi. The transformation of polypi into carcinoma is a fact which is fully established by pathologic investigation. The problem is not whether it occurs, but how frequent this transformation is.

One of the reasons why surgeons and pathologists have sometimes expressed the idea that practically every polyp is a potential carcinoma may be based on the experience in so-called *familial adenomatosis*. I present here a picture in which the entire colon was riddled with large and small pedunculated polypi. In addition, you can see an infiltrating carcinoma. Familial polyposis or adenomatosis practically always becomes associated with carcinoma, and the carcinomatous degeneration of one or several polypi may occur at an early age. This carcinomatous transformation of polypi is, however, a special feature of this peculiar familial malady. We must not forget that there is a peculiar genetic constitution which is responsible for this condition, and must be cautious in making any generalization as regards the question of the carcinomatous degeneration of ordinary polypi. Generalized adenomatosis must be separated from multiple polypi.

The carcinomatous transformation of a single polyp can be suspected on gross examination. I present here a large pedunculated polypoid growth in which there are several areas which differ in their color from the rest of the tumor. Whenever we encounter a polyp which shows variation in appearance and consistency we must suspect the possibility of development of carcinoma and examine it very carefully under the microscope. This case, for instance, proved to be a polyp with early carcinomatous transformation. Since it is obviously pedunculated one could recommend a simple resection of the tumor. One has however to be cautious and has to examine the stalk for tumor invasion. Only if the pedicle is free on microscopic examination can one rest satisfied with simple resection. The carcinoma which develops in the pedunculated polyp is not as dangerous as the flat sessible polyp with malignant transformation. In the next picture you see the cross section through a flat polypoid neoplasm. You see that the muscular coat is not involved and the submucosa seems to be free except in one area where there is beginning invasion by carcinoma cells. This infiltration occurred just below an ulcerated focus at the surface.

There are certain types of polypi which we have to view with greater suspicion than others, but the microscopic examination alone can decide; the microscopic examination supplies us also with criteria to recognize the probability of future carcinomatous degeneration of a polyp. Among the microscopic features which have to be considered there are villous appearance of the polyp, irregularities in the cell arrangement, atypism of the surface cells and particularly the occurrence of conspicuously large nucleoli. These are the features which can be interpreted as evidences of potential malignancy.

I am unable to give a definite statistical estimate as to the frequency of the transformation of polypi into carcinoma. From the data which I have assembled I believe that about 20 per cent of the carcinomata of the colon originate in polypi. Since autopsy experiences have demonstrated that benign polypi are very frequent in the colon, it is obvious that this percentage does not apply to the carcinomatous transformation of the benign polyp. It is certainly much lower.

There is finally the question of the development of carcinoma in *ulcerative colitis*. I present a picture of such a case in which you see the typical chronic nonspecific ulcerative colitis and, here, a carcinoma. There are reports from the Mayo Clinic according to which this was found to be a relatively frequent occurrence. Their figures were statistically evaluated. Our experience is not the same. Although we have seen very many cases of ulcerative colitis we have observed only 3 cases of associated carcinoma.

At the end I would like to present a tumor which is rare, but nevertheless deserves your attention because of its extreme malignancy. You see here the picture of a *melanocarcinoma* of the rectum.

Finally, another neoplastic condition should be mentioned, although it does not originate within the colon. It is the *adenomyosis* of the recto-vaginal septum which sometimes causes stricture and a clinical picture identical to carcinoma.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 277th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on October 14, 1948. The meeting was called to order at 7:45 P.M. by the President, Dr. Leabert Fernandez. Members present were: Drs. Leo Bernstein, S. R. Brown, M. H. Chang, M. L. Chang, W. T. Chock, H. E. Crawford, E. B. Cunningham, D. S. Depp, L. R. Fernandez, S. M. Haraguchi, V. Jim, J. Jenkin, S. Kasamoto, W. Loo, R. M. Miyamoto, A. Orenstein, C. L. Phillips, H. M. Sexton, G. Tomoguchi, H. B. Yuen. Guests present were: Dr. G. Batten, Mr. O. B. Patterson, Mr. James Carroll, Mr. Robert H. Ward.

An invitation from the Hawaii County Dental Society to hear an address by Dr. R. C. Dalgleish, Trustee of the American Dental Association, was presented. The program is to be held in the staff room of the Hilo Memorial Hospital at 7:30 P.M. on November 4, 1948.

The Report of The Public Policy and Grievance Committee was presented. The Committee announced that a meeting with Dr. G. Batten and the local Cancer Society was planned to emphasize the need for expenditure of cancer funds for education, diagnoses and follow-up work on this island.

The contractual fee schedule previously mailed to all members was discussed. Dr. H. Sexton moved that the proposed contractual fee schedule, including the recent changes, be approved in principle provided that it does not jeopardize HMSA. Seconded by Dr. C. Phillips and carried unanimously. In addition, the following comments were made: the unit value for insurance examinations should be 10.0 instead of 7.5; the surgery schedule for pterygium is too high: the unit value should be about 35.0 instead of 60.0; the unit value of tonsillectomy is too high; the services included under normal delivery should be clarified regarding prenatal and postpartum care.

Mr. O. B. Patterson, Executive Director, HMSA, discussed the new HMSA program.

Dr. G. Batten discussed the proposed program of the Hawaii Cancer Society which includes education, medical care, consultation services and research.

A film was shown on "Curare in Barbiturate Oxygen Anaesthesia."

* * *

The 278th regular (and semi-annual) meeting of the Hawaii County Medical Society was held at the Hilo Country Club on November 20, 1948. A golf tournament was held in the afternoon and dinner was served at 6:45 P.M. The business meeting was called to order at 7:45 P.M. by the Vice-President, Dr. H. Sexton, in the absence of the President, Dr. L. Fernandez. Members present were: Drs. W. N. Bergin, L. Bernstein, M. H. Chang, M. L. Chang, W. T. Chock, H. E. Crawford, E. B. Cunningham, S. M. Haraguchi, R. T. Hata, S. Kasamoto, T. Kutsunai, W. F. Leslie, W. Loo, J. Matsumura, R. M. Miyamoto, H. Okada, A. Orenstein, T. Oto, C. L. Phillips, H. M. Sexton, L. L. Sexton, W. J. Seymour, G. Tomoguchi, T. D. Woo, and H. B. Yuen. Guests present were Dr. F. D. Nance and Mrs. R. Keleher.

A letter was read from Dr. Vernon K. S. Jim requesting the transfer of his membership to the Maui County Medical Society.

A request from the Hawaii Tuberculosis Association for the purchase of Christmas Seals was presented. The Public Policy and Grievance Committee submitted their recommendation that the Society forego this purchase since the membership are approached individually for contributions and since it would set a precedent for all fund collecting projects. Dr. A. Orenstein moved, seconded by Dr. W. Loo that the recommendations of the Public Policy and Grievance Committee be accepted. This motion was carried unanimously.

A letter was read from Dr. Fred Irwin, Medical Director, HMSA, regarding the complaint of the Veterans Administration that physicians charged the maximum fee of $5.00 for hospital visits instead of the usual fee of $3.00 charged private patients. The Public Policy and Grievance Committee submitted the following recommendations on this matter. The concensus of the Committee was that the Veterans Administration fee schedule is at fault. The Committee recommended the payment of $3.00 per hospital visit for the entire period of hospitalization rather than the current practice of payment of $5.00 per visit for a portion of the total visits. It was moved by Dr. W. Seymour, seconded by Dr. H. Yuen and carried unanimously that the recommendations of the Public Policy and Grievance Committee be approved.

Communications were read on the HMSA "C" Schedule plus 10% additional. These communications were received from Dr. Fred Irwin, Medical Director, HMSA; Mrs. Edith C. Bennett, Executive Secretary, Hawaii Territorial Medical Association; and Dr. S. L. Yee, Secretary, Honolulu County Medical Society. The Public Policy and Grievance Committee reported their recommendations were that the Society adopt this fee schedule temporarily to facilitate the operation of HMSA, but that all facts regarding a uniform fee schedule for contractual operations be brought out by the Territorial Public Relations Committee and submitted to the House of Delegates before final action is taken. The Committee also recommended that they give this matter further study and report at the next meeting.

It was the consensus that although the HMSA operates on a contractual fee schedule, it is a non-profit organization supported by the physicians as a method for combating socialized medicine. Dr. A. Orenstein moved, Dr. C. Phillips seconded, that the Society approve the HMSA "C" Schedule plus 10% additional. This motion carried unanimously. It was agreed that the Public Policy and Grievance Committee study further the problem of fee schedules for contractual operations.

The Public Policy and Grievance Committee reported that Mr. S. K. Smiddy, representing the Rotary Club of Hilo, requested the approval of the Medical Society for the establishment of a cerebral palsy treatment

center in Hilo. Plans for this project were outlined. The Public Policy and Grievance Committee recommended that the Hawaii County Medical Society approve and support the proposed cerebral palsy project. Dr. A. Orenstein moved that the Committee's recommendations be accepted. Seconded by Dr. H. Yuen and carried unanimously.

The scientific program consisted of a talk on "The Care of Premature Infants" by Dr. F. D. Nance of Honolulu. He recommended the establishment of a central premature center to which all hospitals could send their prematures for care. Mrs. Rae Keleher, Hospital Nursery Consultant, Health Department, Territory of Hawaii, spoke on "The Nursing Care of Premature Infants." She emphasized the need of a sufficient number of well trained nurses who could provide individualized care for premature infants.

LEO BERNSTEIN, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The monthly meeting of the Honolulu County Medical Society was held in the Mabel Smyth Building on November 5, 1948 with Dr. Gotshalk presiding; 46 members and guests and 6 patients for demonstration present.

The chairman announced that a bulletin is now being sent to all members informing them of actions taken by the Board of Governors. Business transacted by that Board may be brought up for discussion at the next County Society meeting.

Mrs. Bennett read an invitation from the nurses to attend an "open house" and a dramatic presentation in connection with their Diamond Jubilee celebration.

The scientific program was presented by the staff of Aiea Naval Hospital. Captain Tayloe, commanding officer of the hospital, introduced the speakers. Commander Edward A. Kearney told of his experience with vagotomy. His paper was discussed by Dr. Rogers Hill. Commander John H. Cox presented an unusual case of bone involvement in early syphilis. Drs. Samuel Allison, Edwin Chung Hoon and Walter Quisenberry discussed his paper.

Refreshments were served on the lanai.

A regular meeting was held on Friday, December 3, 1948, at 7:30 p.m. in the Mabel Smyth Building. Dr. Gotshalk presided. There were 112 members, patients, and guests present during the scientific meeting. Seventy-six doctors remained for the business meeting.

A color and sound movie was shown—Curare, Barbiturate, Oxygen Anesthesia.

Dr. J. Robert Jacobson of the Territorial Hospital presented a paper on Psycho-dynamic Electro-therapy, a New Psychiatric Modality. Dr. Jacobson's paper was discussed by Dr. Guensberg and Dr. Stevens.

Dr. Hill, as chairman, presented the following report of the Fee Schedule Committee:

We make the following recommendations for your approval:

1. Separate H.M.S.A. fee schedule. Old C schedule plus 10% as voted by the Society.
2. Revised preamble to the industrial accident fee schedule.
3. Revised industrial accident fee schedule, as submitted.
4. Revised Life Insurance examination fees as follows:

Regular	$ 7.50
Short form	4.50
Letter of information	3.00

Pointing out that this was a majority report, he also read the following minority report:

Recommended revision of life insurance examination fees:

Regular	$10.00
Short form	5.00
Letter of information	3.00

Recommended revision of calls and consultations:

First office visit	$ 5.00
Subsequent office visits	4.00
Hospital visits	4.00
House visits, day	8.50
House visits, night	10.00
Consultation, hospital	15.00
Consultation, home	25.00
Consultation, office	15.00

Suggested addition of mileage: 75 cents during the day and $1.00 at night, for more than 5 miles from point of departure.

The chairman stated that when the fee schedule is agreed upon by the Medical Society, it will not become effective immediately. It must still be negotiated with the insurance companies.

The recommendation of a separate H.M.S.A. fee schedule, consisting of the previous "C" schedule plus 10 per cent, was unanimously approved on motion of Dr. Arnold, Jr., duly seconded. The recommendation to adopt the revised preamble to the industrial accident fee schedule, as presented to the Society by mail on November 23, 1948, was unanimously approved.

The fees for calls and consultations on page 4 of the revised industrial accident fee schedule were discussed in comparison to those submitted in the minority report. Dr. Arnold, Jr. moved the adoption of the majority report in regard to calls and consultations. The motion was seconded and passed by a vote of 34 to 19. Dr. Hartwell moved that the minimum fee for any type of anesthesia be $10.00. The motion was seconded and carried by a vote of 28 to 2.

The Fee Schedule Committee recommended the deletion of the item "Intravenous antiluetic medication p.c.d. $5.00." It recommended the addition of an item "Psychiatric examinations by arrangement and agreement." These were both accepted by the Society.

Dr. Gordon moved, seconded by Dr. Liljestrand, that the entire industrial accident fee schedule be accepted according to the majority report. A motion by Dr. Gaspar, seconded by Dr. Cloward, to table Dr. Gordon's motion, was defeated by a vote of 14 to 25. Dr. Gordon's motion to accept the revised fee schedule was carried by a vote of 29 to 17.

Dr. Cloward proposed that all of the neurosurgical fees be omitted from this fee schedule. However, he was assured the Fee Schedule Committee would be receptive to any suggestions from him and the fees were allowed to remain.

The fees for life insurance examinations were discussed, as recommended by the majority and minority reports. Dr. Mon Fah Chung moved acceptance of the minority report providing for a regular life insurance examination at $10.00, short form $5.00, and letter of information $3.00. This motion was seconded and passed by a vote of 39 to 1.

Dr. Gordon moved that the Fee Schedule Committee be empowered to negotiate this fee schedule with the insurance carriers. The motion was seconded and passed.

The business meeting adjourned and refreshments were served on the lanai.

SAMUEL L. YEE, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital in Lihue, Kauai, on November 10, 1948. Members present were Drs. Bickell, Chisholm, Cockett, Fujii, Goodhue, Ishii, Mason and Masunaga. Dr. Lynn, Psychiatrist of the Bureau of Mental Hygiene and Dr. Steuerman, Resident Physician at the Wilcox Memorial Hospital were present as guests.

Dr. Lynn voiced his appreciation to the Kauai doctors for their interest and cooperation in neuropsychiatric referrals. He then discussed electroshock therapy. Following this, the Treasurer pointed out that donations to the Kauai County Medical Society Mental Hygiene Fund were suffering from progressive laxations on the part of the Kauai doctors who referred cases for psychiatric consultation. The members went on record as approving the forwarding of monthly statements for donations on psychiatric referrals. These donations are to be used for the purchase of psychiatric materials and for the advancement of Dr. Lynn's work on Kauai.

A film titled, "Curare in Barbiturate Oxygen Anesthesia" was shown at 7:40 p.m.

WILLIAM N. GOODHUE, M.D.
Secretary

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MAUI COUNTY MEDICAL SOCIETY

The regular December meeting of the Maui County Medical Society was held at the Maui Grand Hotel, Tuesday, December 20, at 7:00 P.M. Members present: Drs. Tompkins, Sanders, Fleming, Wong, Kashiwa, Patterson, McArthur, Beland, H. Kushi, Rockett, Burden, Cole, Kanda, and Underwood. Guests: Drs. Allen and Jim.

The financial report was given by the treasurer. It was moved by Dr. McArthur, seconded by Dr. Sanders, that the cost of the two parties given to the visiting Honolulu doctors be pro-rated among the Maui doctors exclusive of the doctor from Hana. Passed, with one dissenting vote.

It was moved by Dr. Burden, seconded by Dr. Fleming, that the society purchase a 3 x 4 slide projector, using from the treasury whatever amount is necessary over and above the amount donated by the Honolulu doctors.

It was moved by Dr. Burden and seconded by Dr. Patterson that the Women's Auxiliary be paid the sum of $213.63 for expenses incident to entertaining the Honolulu doctors. Passed unanimously.

It was moved by Dr. McArthur and seconded by Dr. Beland that the subscriptions to all medical magazines be allowed to expire when the time comes to renew each subscription. Due to the fact that the doctors live a considerable distance from Malulani Hospital and since after investigation it was found that the doctors subscribe to the majority of the magazines for themselves, it was felt that a continued outlay of money for this purpose served no useful purpose. Passed unanimously.

It was moved by Dr. Sanders, seconded by Dr. Cole, that the society accept the H.M.S.A. C Schedule plus 10% as the standard for fees charged the H.M.S.A. for medical care of their subscribers. Passed unanimously. The secretary was instructed to write Dr. Irwin informing him of this action. It was moved by Dr. McArthur and seconded by Dr. Sanders that this society use the H.M.S.A. C Schedule plus 10% as the basis of all charges for care of beneficiaries of the Veteran's Administration. Passed unanimously. The secretary was instructed to inform Dr. Irwin and the H.M.S.A. of this action.

It was moved by Dr. McArthur and seconded by Dr. Burden that, "The Maui County Medical Society go on record as believing that the theory of Communism is un-American and detrimental to the American way of life and that the Maui County Medical Society will be glad to lend its support to any movement or organization tending to curb the theories of Communism." Passed unanimously. The secretary was instructed to inform the Commander of the American Legion, Maui Post No. 8, of this action.

President Kanda appointed the following members to the nominating committee: Drs. Izumi (Chairman), Patterson and Dunn.

E. B. UNDERWOOD, *Secretary*

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RECENT ACQUISITIONS

Allergy

Vaughan, W. T. *Practice of allergy.* 2nd ed. c1948. (Gift of publisher.)

Anatomy & Physiology

Kimber, D. C. *Textbook of anatomy and physiology.* 12th ed. (From Nurses' Association.)

Maximow, A. A. *A textbook of histology.* 5th ed. c1948. (Gift of publisher.)

Cardiology

Brams, W. A. *Treatment of heart disease.* c1948. (Gift of publisher.)

Groedel, F. M. *The venous pulse and its graphic recording.* c1946. (Gift of author.)

Dermatology

American Academy of Dermatology and Syphilology, Registry Committee on Dermal Pathology. *Atlas of dermal pathology.* 4th ed. c1948. (Gift of Medical Dept., U. S. Army.)

Wiener, Kurt. *Skin manifestations of internal disorders.* c1947.

Endocrinology

Selye, Hans. *Textbook of endocrinology.* c1947.

Family Ethics

Fishbein, Morris, ed. *Successful marriage.* c1947. (Gift of publisher.)

Kinsey, A. C. *Sexual behavior in the human male.* c1948. (Gift of publisher.)

Hospitals

A.M.A. intern's manual.

Huffman, E. K. *Manual for medical records librarians.* 2nd ed. c1948. (From Hospital Association.)

Laboratory Technique

Gradwohl, R. B. H. *Clinical laboratory methods and diagnosis.* 4th ed. 3 v. c1948. (Gift of publisher.)

Zinsser, Hans. *Textbook of bacteriology.* 9th ed. c1948. (Gift of publisher.)

Medical Dictionaries

Kato, T. *Neues medizinisches worterbuch der Japanisch, Lateinisch, Deutschen und Englischen sprache.* 1924. (Gift of Library of Hawaii.)

Littre, E. *Dictionnaire de medecine.* 19th ed. 1902. (Gift of Dr. L. A. R. Gaspar.)

Neurology and Psychiatry

Association for research in nervous and mental disease. *Epilepsy.* v. 26. c1947.

Karpman, Ben. *Case studies in the psychopathology of crime.* v3-v4. c1948. (Gift of publisher.)

Nursing

Brown, E. L. *Nursing for the future.* c1948. (From Nurses' Association.)

Campbell, A. D. *Gynecology for nurses.* c1946.

Gilbert, A. J. *Essentials of pharmacology and materia medica for nurses.* 2nd ed. c1944.

Lowsley, O. S. *Urology for nurses.* 2nd ed. c1948. (From Nurses' Association.)

Montag, M. L. *Nursing arts.* c1948. (Gift of publisher.)

National Nursing Council. *A thousand think together.* 1948. (Gift of Hawaii Chapter, National League of Nursing Education.)

Neal, R. E. *Chemistry in nursing.* c1948. (From Nurses' Association.)

Ophthalmology

Clevenger, E. I. *Principles governing eye operating room procedures.* c1948. (Gift of publisher.)

Goar, E. L. *Handbook of ophthalmology.* c1948. (Gift of publisher.)

Wolff, Eugene. *The anatomy of the eye and orbit.* 3rd ed. c1948.

Pediatrics

Shultz, G. D. *Your baby.* c1948. (Gift of publisher.)

Pharmacology & Therapeutics

Long, P. H. *A-B-C's of sulfonamide and antibiotic therapy.* c1948. (Gift of publisher.)

Wright, H. N. *A textbook of pharmacology and therapeutics.* 4th ed. c1948. (Gift of publisher.)

Psychology

Dorsey, G. A. *Why we behave like human beings.* c1925. (Gift of Mrs. Castle.)

Roentgenology

Brailsford, J. F. *The radiology of bones and joints.* 4th ed. c1948.

Glasser, Otto. *Physical foundations of radiology.* c1944.

Surgery

Ilgenfritz, H. C. *Preoperative and postoperative care of surgical patients.* c1948. (Gift of publisher.)

Tuberculosis

National Tuberculosis Association. *Tuberculosis hospital and sanatorium directory.* c1948. (Gift of Tuberculosis Association.)

Urology

Addis, Thomas. *Glomerular nephritis.* c1948.
Everett, H. S. *Gynecological and obstetrical urology.* 2nd ed. c1947.

Miscellaneous

American Association for the Study of Goiter. *Transactions.* 1947.
Cochrane, R. G. *A practical textbook of leprosy.* 1947.
Dowling, J. F. *The acute bacterial diseases.* c1948. (Gift of publisher.)
Fishbein, Morris. *Medical writing.* 2nd ed. c1948. (Gift of publisher.)
Froeschels, Emil. *Twentieth century speech and voice correction.* c1948. (Gift of publisher.)
Hamburger, Jean, ed. *Medical research in France during the war.* (1939–1945.) n.d. (Gift of the Rockefeller Foundation.)
Leitao, Antoni. *Tellurologie et climatologie medicales.* 1921. (Gift of Dr. L. A. R. Gaspar.)
Petersen, W. F. *Man, weather, sun.* c1947. (Gift of publisher.)
Rivera, Diego. *Sus frescos.* 1946. (Gift of Dr. H. L. Arnold.)
U. S. Public Health Service. *Recent advances in the study of venereal diseases.* 1948. (Gift of U. S. Public Health Service.)
Warkentin, John. *Physician's handbook.* 5th ed. c1948. (Gift of publisher.)
Zimmerman, E. C. *Insects of Hawaii.* 5v. c1948. (Gift of publisher.)

The Bureau of Mental Hygiene, now located in new quarters on the grounds of the University of Hawaii, has requested the recall of many books which were placed in the Medical Library on loan. These books have been listed in past issues of our acquisitions, and should anyone wish to borrow them, application should be made direct to the Bureau, whose new telephone number is 94812.

An article entitled "Duo Liquid Adhesive—its Uses in Neurosurgery" by Dr. Ralph B. Cloward appeared in the *American Journal of Surgery* for September, 1948.

A case report entitled "Diasone Treatment of Actinomycosis of the Jaw," by Dr. Harry L. Arnold, Jr. and Dr. E. R. Austin, appeared in the J.A.M.A. for November 27, 1948.

The Medical Library wishes to thank the Surgical Society for their continuation of the subscription to the Surgery Section of Excerpta Medica.

A large shipment of medical journal duplicates was recently sent to the Scientific Library in Manila. They were received with many expressions of appreciation.

The Transactions of the Hawaii Territorial Medical Association are now being indexed for the first time. These proceedings are a most interesting and valuable record of early medical reports in the islands, and it is regrettable that none were published prior to 1904.

BOOK REVIEWS

Medical Clinics of North America. September 1948 issue. Boston Number. pp. 1159 to 1482 incl. $18.00 per yr. W. B. Saunders Company, Philadelphia and London, 1948.

This issue of a perennial pillar of medical wisdom is devoted to specific methods of treatment. The gamut is run from Infertility to Poliomyelitis. There is included something of interest for practically every kind of medical practitioner—there are even a few polypharmaceutical prescriptions for the treatment of extrasystoles which would delight an herbalist.

Medical treatment of urinary calculi is one of the more fascinating sections. Various diets and medications are suggested to alter the pH of the urine and thus prevent stone formation in patients who have passed stones of known composition. A "solution G" (main component: citric acid) is offered which will dissolve calcium phosphate stones. Ureteral irrigation for as long as forty days with this solution is required to dissolve large stones.

The sections on medical treatment of rheumatoid arthritis and essential hypertension are, as usual, discouraging. The use of veratrum viride in the treatment of hypertension is being revived. It is apparently a potent hypotensive agent since only 10 to 20 per cent of patients fail to get a hypotensive effect. However, it is a much more difficult drug to manage than even the thiocyanates. Fine adjustments in dosage are necessary to prevent vomiting.

Each subject is covered thoroughly, and the reading is easy and enjoyable. When you've finished the volume you have the complete and final word on a variety of subjects—at least until next month.

C. A. Domzalski, Jr., M.D.

Surgical Clinics of North America—Symposium on Surgical Physiology. Mayo Clinic Number. pp. 851-1121. Price $18.00 per yr. W. B. Saunders Company, Philadelphia and London, 1948.

This number consists of six chapters on surgical physiology and thirteen clinics on general surgical subjects. An apparatus for recording physiological variables during operations on man is described. This apparatus can record arterial and venous blood pressure, using the strain gauge manometer as described by Lambert and Wood; changes of respiratory pressure within the anesthetic mask, using a similar strain gauge manometer within an air system; arterial oxygen saturation, using Millikan's compensated circuit oximeter; the electrocardiogram and the pulse rate, using the cardiotachometer as described by Sturm and Wood; and appropriate time signal.

Records have been obtained of the changes of arterial blood pressure which occurred in the course of four resections for coarctation of the aorta. Severe acute hypertension occurred in 2 cases in which the left subclavian artery was temporarily clamped, and was not encountered in 2 other cases in which this vessel remained uninterrupted. On the basis of these observations during resection for coarctation of the aorta, it is recommended that whenever possible, the proximal aortic clamp be placed distal to the subclavian artery to avoid the severe hypertension. This article should be studied by all interested in cardiovascular surgery. The use of this new apparatus in the operating room enlarges an interesting field previously limited to the laboratory.

Seybold contributes an interesting discussion on early postoperative atelectasis after lobectomy. This article emphasizes prevention and is worth reading for all chest surgeons.

Dixon and Judd present a study of all cases of congenital megacolon in which surgical treatment was given during the years 1909–1945, a total of 80 cases. Twenty-six patients had sympathectomy and 54 underwent resection of the colon. They believe the treatment of choice is resection of the diseased segment of the bowl.

The other clinics of general surgical nature are well presented and illustrated.

Kenneth Amlin, M.D.

A-B-C's of Sulfonamide and Antibiotic Therapy. By Perrin H. Long, M.D., F.R.C.P. 231 pp. Price $3.50. W. B. Saunders Company, Philadelphia and London, 1948.

This handy little book is a concise compendium of the pharmacology of the sulfonamides and the antibiotics. Coming as it does from the pen of a man who has been concerned with these substances from their first introduction into medicine, it is what one would expect it to be, an authoritative statement of the pharmacology, the uses and the indications and contraindications for these substances. It is astonishingly up to date, containing as it does the discussion of even procaine penicillin and the aerosol method of administration. The section containing individual statements of the method of treatment advised in various diseases is particularly useful in that in many of them the frank statement is made that neither the sulfonamides nor any of the antibiotics are of any use in the treatment of this disease. Where the matter is still open to discussion, it is clearly stated that sufficient trial has not been made or at least the results have not been published to justify a statement, as, for example, in the case of plague.

The chapter on tuberculosis is particularly good, warning against the dangers of the indiscriminate administration of streptomycin to anyone who has tuberculosis. In each case, too, the reasons for and against the employment of streptomycin are carefully set forth.

In discussing mixed sulfonamide therapy on page 3 he recommends a combination of sulfadiazine and sulfamerazine but his statement as to dosage is distinctly ambiguous. He says a combination, not saying whether it is half and half or what portion, to be given on a basis of 90 mg. per kilo of body weight as an initial dose. The initial dose of sulfamerazine is 75 mg. and the initial dose of sulfadiazine is 100 mg. Presumably, 90 mg. for the combination means 90 mg. of a 50 per

cent mixture of sulfadiazine and sulfamerazine but certainly it is not clear.

The book is unhesitatingly recommended to physicians of every specialty since it takes up the use of these substances in almost every condition known to practice.

H. L. Arnold, M.D.

A.M.A. Interns' Manual. 209 pp. Price $2.25. W. B. Saunders Company, Philadelphia and London, 1948.

This pocket-sized volume contains a wealth of valuable information, divided into nine sections plus an index. The sections are divided as follows:

I—Internships & Residencies—General Information.

II—Clinical & Laboratory Data.

III—Drug Administration.

IV—Materia Medica—Useful Drugs.

V—Acute Poisoning—Diagnosis & Treatment.

VI—Diet & Nutrition.

VII—Physical Medicine.

VIII—Lawful Scope of Intern Practice.

IX—The American Medical Association.

The sections on acute poisoning and clinical laboratory data in themselves make this book a handy reference not only for the intern, but also for the practicing physician.

Lacking are the preparatory methods for the x-ray dye and barium studies, so often included in house staff manuals.

Taken as a whole, this book will be of inestimable value to the beginning physician.

Raymond M. deHay, M.D.

A Textbook of Histology. By Alexander A. Maximow and William Bloom. Fifth Edition. 700 pp. W. B. Saunders Company, Philadelphia and London, 1948. Price $8.50.

The great, keen mind of that close observer, master technician, consummate artist and true scientist, Alexander A. Maximow, goes rolling down the ages in this fifth edition of his final work. When he died, in 1928, some parts of the book had been completed, as well as many of his inimitable illustrations—he abhorred photomicrographs. But the remainder was in utter chaos, much in Russian and unfinished. Out of that chaos his associate, Bloom, brought order and the book. Now, in the fifth edition, Bloom and his co-workers have built high on the foundation and deserve great credit.

What is there left to say about Maximow's great book that every medical student and every practitioner under fifty does not already know? Only that histology is not static and identical with that of 1930—newer microscopes and microchemical methods have added much to our knowledge.

The book is authoritative. It is ideal for the undergraduate student and the graduate student as well. Every pathologist will find it a ready reference. (There ought to be a law making every graduate of more than ten years' standing, again read a modern text on histology and one on physiology.) In comparison with the first edition, which lies before me, this fifth edition is a delight to the eyes. The text has been broken into double columns that make reading a pleasure and Bloom has even improved on Maximow's wonderful drawings; he has spelled out the labels on the illustrations to replace the confusing letters and abbreviations.

It certainly is a lot of book for $8.50.

Many of us are proud to have memories of Maximow's visit to Hawaii during the summer of 1926.

E. A. Fennel, M.D.

Your Baby. By Gladys Denny Shultz and Lee Forrest Hill, M.D. 278 pp. Price $3.50. Doubleday & Company, Inc., New York, 1948.

Everyday is "Father's Day" to these authors. The entire book is slanted to bring the father back to the family group where he belongs, and which of course he heads, despite the "on-looker" position to which he has been relegated by our professional over-preoccupation with the mother's needs and problems. Another obvious strength of this baby book is that it starts out with a consideration of pregnancy. Therefore, it comes to the parents' attention at a time when their interest in maternal and child health is high, and yet reaches them before they are overwhelmed with the bewildering presence of a new baby in the home—a presence that is not always conducive to studying books on baby care or on any other subject.

There is a pleasant tone to the book and a sensible simplification of child care procedures, so that the parents are encouraged to relax a bit and enjoy their baby without having to feel as though their relaxation might be an act of parental negligence.

The weaknesses of the book are less obvious than the strengths, the principal weakness being that the authors might profitably have pursued their family theme to its logical conclusion. They have opened their arms to embrace Dad, why not embrace the family as a whole? Even though they have included Dad there is still a feeling as though they are always addressing a couple with their first baby, or else that they have disregarded the existence of little brothers and sisters. The same tendency is shown in their approach to feeding the baby. There is an almost total reliance on food purchased and prepared especially for baby and no particular effort made to unite the family into a family unit. Baby apparently is to be given his foods and vegetables chiefly from ready prepared canned infant foods, without the authors taking this golden opportunity to show the parents which family foods the baby can share, and how, little by little, the dietary considerations become *family* diet considerations with a resulting increase in family solidarity (not to mention an improvement in diet for the whole family).

The book is unusually attractive, well bound and with large appealing photographs and an interesting record section, where father gets his chance as observer and historian. It would make a nice gift for a mother and father, particularly (a) if given to them early in pregnancy and (b) if this is their first child.

Pauline G. Stitt, M.D.

Nursing Arts. By Mildred L. Montag, A.M., R.N., and Margaret Filson, A.M., R.N. 603 pp., 127 figures. Price $3.50. W. B. Saunders Company, Philadelphia and London, 1948.

In reviewing this book, one feels that already many excellent Nursing Arts books have been published, and this volume does not come up to the standard that has been established. The authors are ambitious that it will be accepted as a text book for student nurses and as a reference for graduates in the practice of nursing.

It is entirely too elementary to be of any value to the graduate who wants to keep abreast with the best nursing practices. It is too indecisive and omits too much that is part of Nursing Arts to be of value as a school text book. A student would need at least one of the well written, well established procedure books to explain the contents of this book to her. The book is written in a controversial style and romps around in the entire field of nursing subjects without being too informative on any of them. Even though it presents newer techniques, it is too indefinite to be used as a nursing manual.

The book, however, is not without merits. It shows evidence of much research, although the facts that have been gleaned out of other books are not condensed or particularly well organized. Several chapters have been written by authorities other than the authors, and these are excellent. The most worthwhile chapter in the book is on "The Religious Needs of the Patients," which should be read and re-read by all who have any contact with the sick.

The book is so generalized in its scope and lacks so much in medical and nursing terminology and techniques that it could be recommended to a potential pre-nursing student who would like to have a birdseye picture of what nursing involves. The lay employees and trustees of hospitals would obtain a better understanding of the functions of a hospital as a community institution by reading this book.

ROBERTA LINDBERG, R.N.

Technique of Treatment for the Cerebral Palsy Child. By Paula F. Egel. Introduction by Winthrop M. Phelps, M.D. 203 pp. Price $3.50. The C. V. Mosby Company, St. Louis, 1948.

This is decidedly one of the most thoroughly comprehensive and completely instructive books so far published on the various types of cerebral palsy in children and its effective treatment.

The book should surely be classified as a *must* for all medical and professional technicians who are interested in a treatment program for these cerebral palsy children.

It interprets and gives to the reader most clearly and thoroughly a complete knowledge of the numerous types of cerebral palsy children; and the treatment program is one that is now being more or less taught and followed throughout the United States.

It gives a very clear and descriptive picture for the organization of Cerebral Palsy Departments in children's hospitals or treatment units.

Too, it must be remembered that the future of a cerebral palsy child is of the greatest importance and should always be kept in mind when plans for treatment are being made.

"Cerebral Palsy treatment is a specialized field which needs specialized study. There are few instructors and comparatively few trainers at the present time. It provides a rare field for the persons who are interested in professional frontiers."

CATHARINE NOURSE, O.T.R.

Surgical Clinics of North America—Symposium on Gastrointestinal Surgery. Nationwide Number. pp. 1123 to 1398. Price $18.00 per year. W. B. Saunders Company, Philadelphia and London, 1948.

The Surgical Clinics of North America has brought to surgeons over a period of many years the latest developments in this field of medicine. Its contributors have been well selected so that the reader appreciates the fact that he is listening to those who speak with authority. Subjects covered are varied, the discussion is usually short, concise, to the point and suitable for practical application by the busy clinician. No one intent upon keeping abreast with the developments of modern surgery can afford to miss reading each volume thoroughly as it comes from the press. The volume above mentioned is no exception to those that have gone before. The symposium on gastrointestinal surgery is of particular interest to the reviewer, though there are a variety of subjects covered, all of interest to the general surgeon.

Since we in Hawaii have become cancer-of-the-stomach-conscious, largely because of the high incidence of the disease in Japanese, we are agreed, I believe, that no ulcerating lesion of the stomach should ever be treated medically. Crile's suggestion that gastric ulcers be given a trial of medical treatment before considering surgery is not in keeping with our local experience. It seems as though the tragedies that this method of procedure invites are slow to be appreciated.

Eighteen dollars a year for these Surgical Clinics may seem a lot to the young surgeon just starting but I suggest for his professional advancement that he economize in some other direction.

J. E. STRODE, M.D.

Human Biochemistry. By Israel S. Kleiner, Ph.D. Second Edition. 649 pp. Price $7.00. The C. V. Mosby Company, St. Louis, 1948.

This book might be of some use to the clinician should he feel the need for a rather extensively annotated outline of the subject, but its value to the medical student is questionable. To this reviewer's mind it could not serve as a satisfactory text; the author has attempted to cover more or less completely a complex and extensive field while limited physically to some six-hundred-odd pages. This would appear to be a difficult, if not impossible, task. The result is a moderately full outline, with brief discussions that presuppose considerable knowledge of the subject.

The lists of references following each chapter do not appear to have been brought up to date. The great majority of publications cited date back as much as ten, even twenty, years. Recent work in the field, of which there has been considerable, should be included.

The format is good. The type is clear, legible and not too small for comfortable reading, and the paper is of good quality. Illustrations are not profuse but their quality is better than average.

JAMES M. BEEBE, Ph.D.

General Cytology. By E. D. P. De Robertis, M.D.; W. W. Nowinski, Ph.D.; and Francisco A. Saez, Ph.D. 345 pp., with 143 figures. Price $5.50. W. B. Saunders Company, Philadelphia and London, 1948.

The material and ideas in this book are in general sound and well presented. One of the outstanding features is its clarity of explanation. With only a superficial knowledge or recollection, as most physicians have, of organic chemistry and cell physiology, the volume will not be too formidable. Most doctors, medical students, and those at least moderately well trained in chemistry will be able to follow with ease most of the theses which are brought forth in each chapter.

Not only are the facts and theories presented in clear logical sequence, but the methods and tools which

may be used for further investigation are indicated and briefly described.

This edition, which includes new chapters and is based on the original first edition in Spanish, reads smoothly and is correlated with good diagrams and photographs including many electron photomicrographs.

DAVID S. HUBBELL, CAPT., M.C., U.S.A.

The Venous Pulse and Its Graphic Recording. By Franz M. Groedel, M.D. 223 pp., with 7 illustrations and 290 tracings on 114 figures. Price $5.50. Brooklyn Medical Press, New York, 1946.

If you desire the recall of nostalgic memories of physiology laboratory days, then by all means read this book on venous pulse. This is the most comprehensive single volume of its kind in modern literature. There are excellent case histories with graphic records to supplement them. There is also a good description of the various methods of studying the venous pulse.

I found the book interesting from an academic viewpoint only. It most certainly was not entertaining reading, and it has little value for the practicing physician. I can only recommend it for those men who have a more than usual interest in cardiovascular disease.

MORTON E. BERK, M.D.

Insects of Hawaii. By Elwood C. Zimmerman. Volume 4, 268 pp. Price $4.50. Volume 5, 464 pp. Price $6.00. The University of Hawaii Press, Honolulu, 1948.

Volumes 4 and 5 have now been received but your reviewer signs off at this point because the water is just too deep. Mealy bugs, aphids and leaf hoppers I can recognize, but these volumes are reference works for entomologists.

H. L. ARNOLD, M.D.

Occupational Therapy Source Book. Edited by Sidney Licht, M.D. 90 pp. Price $1.00. The Williams & Wilkins Company, Baltimore, 1948.

This book presents a group of original writings on the treatment of mental disease dating from the first century before Christ. The value of this book to the researcher is unquestionable, but its usefulness to the occupational therapist or to the psychiatrist is dubious. It is interesting to know that modern occupational therapy has its roots in the doctrine of "moral treatment" of the insane which was urged by the doctors of centuries past. However, the book is repetitious, as indeed it cannot help but be, and has little to offer once the central theme is understood.

It is an admirable piece of research, but it is hardly a "must" for the busy doctor or therapist.

ELLIN W. BURKLAND, O.T.R.

Synopsis of Psychosomatic Diagnosis and Treatment. By Flanders Dunbar, M.D. 500 pp. Price $6.50. The C. V. Mosby Company, St. Louis, 1948.

This condensation of material relating to the psychosomatic approach to diagnosis and therapy will be found useful to both the general practitioner and the specialist. The text is brief, yet comprehensive, including reports on the latest research in psychosomatic medicine. It is divided into sections dealing with material pertinent to the various medical specialties. An adequate summary follows each chapter.

The selection of case histories is to be commended and these, in conjunction with good continuity of the subject, in general assure one of interesting and informative reading.

E. JAMES YOUNG, M.D.

PSYCHIATRIC COMMENT

THE TERRITORIAL HOSPITAL

MARCUS GUENSBERG, M.D.*

The purpose of this article is to submit to the physicians of Hawaii a brief report on the Territorial Hospital, its functions and place in the community, its growth and plans for the future. This hospital will not be able to discharge its duties, that is, to care for the mentally ill who are indigent and to restore them to mental health in the shortest time possible, unless it receives the full support of the entire medical profession.

During the past twenty years, psychiatry has made tremendous strides in the recognition and treatment of mental illnesses. Diseases of the mind—long considered irreversible and incurable—have been shown to yield to new methods of diagnosis and therapy, with incalculable gains in mental health and human happiness. The early recognition of premonitory behavior disorders and prepsychotic conduct has opened up new vistas in the promising field of preventive psychiatry. We appear to be at the threshold of a new era in which prevention of mental diseases will occupy a prominent place.

The record of the Territorial Hospital and its policies and activities during the past decade clearly reflect the trends alluded to. Only ten years ago, the Territorial Hospital was to all intents and purposes a mere custodial institution, giving only shelter and supervision to the mentally ill entrusted to its care. The medical and psychiatric treatment consisted primarily of sedation and some hydrotherapy. Seclusion and restraint of patients were employed on a large scale. Modern psychiatric treatment and psychiatric nursing were practically non-existent; occupational therapy and the social service of the hospital were in their infantile stages. Gradual and progressive advances and improvements carried on over the past ten years have brought about a complete change in the character and complexion of the hospital. New and proven techniques of diagnosis and all the recognized treatment procedures have been introduced and developed to the highest possible degree, within the boundaries imposed by budgetary limitations, for the explicit purpose of converting this hospital into a modern treatment center. Electro-convulsive therapy and its various modifications, insulin treatment, malaria therapy, neuro-surgery, psychiatric nursing, narcotherapy, various forms of psychotherapy, individual and in groups; and occupational and recreational therapy—the core of modern psychiatric care—have been added in the past ten years.

In the past two years, also, a foundation has been laid for in-service-training of psychiatric nurses and psychiatric aides by establishing a training program covering the most important phases of the theory and practice of psychiatric nursing. This program, however, is still in its embryonic stage and requires further expansion.

These changes have been rendered all the more imperative on account of a constant increase in the rate of admissions to our hospital. There were 230 first admissions to the hospital during the fiscal year 1938–39. This figure has climbed steadily to an all-time high in 1947–48 of 417 admissions, 353 of which were first admissions. Since the rate of discharges did not keep pace with the rate of admissions, the inevitable result was a constant increase in our patient population, resulting in over-crowding and unavoidable curtailment of medical and other services. To stop this trend—that is, to avoid further increases in our patient population with its dismal consequences—it is imperative to increase the number of recoveries and discharges by better and more intensive treatment, and a better follow-up of those who return to the community, and thus establish a balance between admissions and discharges.

This goal, however, cannot be achieved on a "custodial" budget. It is an established truth that the larger initial investment required to give each newly admitted patient the maximum benefits of psychiatric therapy represents the wisest and most economic use of public funds, since it will save the community the imprudent and utterly barren expense of untold millions required for the obsolete forms of custodial care of the chronically ill, destined to spend the largest part of their lives in mental institutions. It is the consensus of the leaders in psychiatric research and practice that over 80 per cent of patients admitted to mental hospitals (exclusive of the senile patients) could and would recover sufficiently within a period of three to four months to return to their former way of life in the community, provided

* Medical Director, Territorial Hospital, Kaneohe.

they were not denied the benefits of available psychiatric knowledge on account of ignorance, apathy, or a false concept of economy on the part of those whose responsibility it is to allot public funds for the care of the indigent mentally ill. The policies of the Territorial Hospital in the years to come must be based on these fundamental truths. They must be aimed at establishing here the standards promulgated and approved by the American Psychiatric Association for all the mental hospitals in the United States. Those standards must be our guide and our foundation in order for our hospital to qualify as a psychiatric treatment center and for us to discharge our responsibility toward the community of Hawaii. We are determined not to allow the young and acutely ill patients to enter a state of irreversible and incurable chronicity because of lack of funds and proper treatment facilities. Such inhumane and economically wasteful treatment of the mentally ill must be replaced by a constructive and enlightened medical program, which is also economically the soundest.

The scope of these trends has been widened recently by newly acquired knowledge and the realization that all cases of maladjustment in interpersonal relationships, ranging from simple behavior disorders to delinquency and crime, should be the concern of psychiatrists, since all these disorders in the final analysis represent deviations from normal patterns of conduct and behavior. The administration of the Territorial Hospital, aware of those borderlands of psychiatry, has actually initiated a psychiatric consulting service in the other institutions which must be expanded in the years to come. A beginning has been made by establishing a weekly psychiatric clinic for the boys at Waialee Training School, for the girls at Kawailoa School, and for the inmates at Oahu Prison. In this new set-up, the Territorial Hospital will take the place of a psychiatric center and clearing house, since it is the only institution qualified to handle and manage the intricate and more difficult behavior problems, or outright psychotic conditions existing in the other institutions of the Territory. This new orientation is aimed at the rehabilitation of the wayward boy or delinquent girl, and at the reintegration of broken or defective personalities, correcting and modifying antisocial trends whenever possible. Such an approach will ultimately give society a well-founded sense of security which cannot be obtained by restrictive or punitive measures alone.

In spite of the considerable progress made, it is our conviction that the most important work in the long and difficult process of converting a custodial institution into a modern effective treatment center is still ahead of us. Our present facilities, the physical plant, our equipment, our personnel, are still inadequate and in urgent need of enlargement and improvement. One aspect of the problem concerning our physical plant is actually in the process of being solved. A new and modern hospital building is being erected and will be ready for occupancy in the fall of 1949. It will accommodate 215 acutely ill patients with a good prognosis and a chance for complete recovery. This will fill one of the most urgent needs of our hospital, since our newly admitted patients suffering from acute mental illnesses are still being denied important phases of psychiatric care due to lack of proper physical facilities. Our equipment, the tools we are working with, are insufficient and to a large extent outmoded and obsolete. They will have to be complemented and replaced by new equipment and new tools. Our personnel is thinly stretched and hardly sufficient to cover the barest essentials of care and supervision required for the welfare and safety of our patients. It must be reenforced and enlarged, and it must be trained and guided to properly discharge its functions and duties toward our patients. New departments essential to the functioning of a modern hospital must be added and organized on a sound basis. A Department of Dietetics and an Educational Department for teaching and training psychiatric nurses and psychiatric aides are among our first objectives. And above all, a more liberal allowance for food must be approved in order to provide our patients with the indispensable essentials of life. This hospital will surely fail in its chief task of restoring the mentally ill to health and happiness unless we can feed them adequately.

We fully realize that to obtain these goals a great deal of ground work and public education will be required. The fact that this program will call for larger expenditures and allocation of public funds will make our task all the more difficult. Yet, we are determined to interpret the needs of the mentally ill of this community to the people of Hawaii and their representatives. Factual information and knowledge alone will insure their fullest cooperation in the solution of a problem so vital to the whole community. It is not our task to tell the people how little can be spent on mental health, but how much can be spent wisely and judiciously. To this work we intend to dedicate ourselves in order to discharge our duties toward the mentally ill entrusted to our care, since they cannot take care of themselves in times of illness and mental stress.

OUR NO. 1 PUBLIC HEALTH PROBLEM

JOHN G. LYNN IV, M.D.*

"One in every ten men, women, and children in the nation will face a serious mental or emotional disturbance sometime in their lives."

"One in every twenty people will have at least one admission to a mental hospital."

"Over half of all hospital beds are for mental patients."

"Nearly 700,000 people (0.4 per cent) in the United States are patients in mental hospitals."

"About 8,000,000 Americans (5 per cent) need psychiatric help in clinics."

In the face of the above and other health statistics, former Surgeon General Thomas J. Parran of the United States Public Health Service calls mental ills "America's No. 1 health problem."

Hawaii's mental ill-health statistics are directly comparable to national figures, with about 2,000 patients in mental hospitals—Territorial Hospital and The Queen's Hospital—and an estimated five per cent, or 25,000 territorial men, women and children, requiring psychiatric clinic help. There are at least five times as many people requiring treatment for mental and emotional disease as there are patients requiring treatment for tuberculosis in the territory.

Early Childhood Detection Essential

As in the fight against tuberculosis, the approach must be a preventive one, based on a community-oriented early-detection-and-treatment program aimed at preventing later chronic disability and expensive long-term hospitalizations.

There is no simple examination of our children which, as the x-ray detects early tuberculosis, can detect early emotional and social maladjustments preceding adolescent and adult mental diseases and delinquency. The alert observations, however, of elementary school teachers, public health nurses, physicians and social workers, can detect and report vulnerable children who, if neglected or mishandled, may progress to severe cases of adolescent or adult mental illness or crime. A recent survey by Ohio State University of thousands of children constituting all of the pupils in the third and sixth grades of the public schools of Miami County, Ohio, showed that 20 per cent of the children exhibited severe enough early symptoms of emotional and mental disorders to require professional guidance and treatment. The following is a check list of the main observable symptoms of potential or incipient mental disease or delinquency:

- Extremely restless
- Etremely excitable—lacks self-control
- Extremely tense or inhibited
- Often left out of play groups
- Bullies other children
- Is bullied by other children
- Self-conscious over physical anomalies
- Self-conscious because aware of socio-economic differences
- Resentful of criticism
- Wants constant reassurance and direction
- Teases maliciously or with intent to hurt or annoy other children
- Shows cruelty toward animals
- Afraid in many situations
- Extremely self-important
- Extremely shy and retiring, with lack of self-confidence
- Not a good sport
- Cheats, lies or steals
- Frequent truant
- Abnormal interest in sex
- Unable to perservere in any mental effort
- Mentally preoccupied—daydreams
- Easily upset, depressed or angered by frustration
- Not able to make decisions and stick to them
- Dogmatic: insists on having own way
- Rigid habits of over-cleanliness, neatness and order
- Overly "good" conforming "model" child

The observation of any of these symptoms by teacher, nurse, doctor or social worker or parent in school-age children under their care should serve as a clear warning of possible serious future trouble unless prompt and understanding guidance and treatment are instituted.

Prompt Treatment Must Follow Early Detection

The following are the essentials of the Bureau of Mental Hygiene's program of early mental disease detection, treatment and prevention:

(1) An educational program aimed at alerting and helping teachers and student teachers, physicians, nurses, ministers and social workers in the early recognition of vulnerable children, with proper utilization of the simpler remedial guidance procedures for re-educating these children and their parents.

(2) Informing these same responsible professional groups of the available and qualified community referral resources for the more serious child-parent maladjustment cases.

(3) Rendering psychiatric consultation services to child-handling agencies, such as juvenile courts, Child and Family Service, Catholic Social Service, guidance and counselling divisions of the Department of Public Instruction, etc.

(4) Rendering full case study and treatment services in the more difficult and severe indigent child-parent problems.

(5) Assisting the private family physicians—especially on the neighboring islands where no private neuro-

* Chief, Bureau of Mental Hygiene, Department of Health.

psychiatric service is available—in the evaluation and treatment of adult and child mental disease problems.

(6) Helping in the development of outer island community oriented psychiatric treatment aimed at maximum utilization of general hospitals for the treatment of early acute mental patients. This will include the use of intensive short-term in-patient and follow-up out-patient electroshock therapy in many acute early psychotic cases. In 1945, 1946 and 1947, the use of electroshock therapy in selected acute psychotic cases by the local county hospital and clinic in Westchester County, New York, reduced by twenty per cent the number of psychotic cases committed to State institutions and kept these patients in their community under the care of their family doctors.

Requirements For Hawaii's Program

The United States Public Health Service and the American Psychiatric Association have, through nation-wide surveys and experimental community projects, discovered and set the minimum standard of one psychiatric clinic team (psychiatrist, psychologist, three social workers and secretaries, for each 100,000 general population) to meet the indigent psychiatric adult and child guidance needs of the average community. The territory's Bureau of Mental Hygiene has but 2¼ psychiatric teams to meet the indigent clinical, educational demands of the 500,000 widely dispersed people, where five teams would meet this minimum standard. With support of over fifteen community agencies requiring the Bureau's consultation and case services, the Health Department conservatively recommended, in its budget request for the next biennium, the addition of one more psychiatric team to its Bureau staff. The establishment and maintenance of such a minimum acceptable standard of weekly child and adult guidance clinics and consultation services for use by local physicians and community agencies is dependent on the continued endorsement and support of the proposed program by the schools, agencies and physicians using or requiring our services.



REMINISCENCES OF DECEMBER SEVENTH: VIII

Statement of Dr. James R. Judd, * taken February 18, 1943. Dr. Judd is under the impression that the new Preparedness Committee was appointed in April 1941 because the old one had not been very vigorous in its action. He was unable to give any reason why there was a division in the assignment of hospital teams for civilian and military work between Dr. Strode and himself, and in fact was surprised when I called his attention to the fact that this was so set up. He stated he and Dr. Strode always worked in cooperation in the planning of the hospital teams.

On the morning of December 7, 1941, he was at his place on the windward side of the island working in his garden. About 8:00 a.m. he heard the firing in the direction of the Kaneohe Naval Air Station. In a little while his wife came out to tell him that the island was under attack, but she could not state under attack by whom. He remarked, "Oh, what a nuisance." They immediately drove into town, watching the flames and smoke of the Naval Air Base. He crossed the unguarded Pali (single cliff road across the island) and found everything peaceful in the Nuuanu valley (between Pali and Honolulu). He proceeded to his home on Makiki Heights and was called by Mr. Olson, the Superintendent of Queen's Hospital, and told he was badly needed there. This was about 10:00 a.m. He rushed to the Queen's Hospital where there were some sixty or eighty casualties, with others still coming in. He was assisted in his work by the regularly assigned teams of Drs. Bell and Hill, and others. Most of the wounded among the civil population were apparently wounded by our own antiaircraft shells [some fired with unset fuses and detonating only on impact—Ed.] The hospital elevators went out of commission and the casualties had to be carried up three flights of stairs. Everything worked smoothly at Queen's Hospital, where there were adequate surgical supplies. The nurses kept their heads and did splendid work. The casualties were all cleaned up by early evening. He stated that the casualties remained under the care of the surgeons who had done the work, and were not returned to the care of their family physicians. He does not know how their hospital bills were paid, and so far as he knows no bills were presented by the physicians or surgeons. He stated further that most of the things which he learned that day were a rehearsal of the things which he had learned in the World War—namely, never to operate in shock, to do a thorough debridement, etc.—and that the new things which he learned at that time were the value of the sulfa drugs, and of fresh blood transfusions. Dr. Judd visited Tripler General Hospital with Dr. J. J. Moorhead on December 13, and was pleased at the condition of the wounded he saw. He saw nothing of the handling of the casualties of the seventh prior to that time or subsequently. The attack of the seventh stimulated a great amount of work to prepare for any subsequent attack.

"I have read the above report of my conversation, and it is true to the best of my knowledge and belief."

JAMES R. JUDD, M.D.

* Dr. Judd died June 1, 1947.

NOTES AND NEWS

PERSONALS

DR. ROBERT PERLSTEIN, associate medical director of the Leahi Hospital, Honolulu, was signally honored on December 4 on the occasion of his twentieth anniversary on the staff of Leahi. Over four hundred persons, largely physicians, nurses and former patients of Dr. Perlstein, attended the event which was held in the auditorium of the new Sinclair Building. Chinese food was served to the guests, following which a program was presented, the theme of which was along the lines of a political rally to "reelect" Bob for another twenty years. Numerous paintings of Bob and his pipe festooned the auditorium. Tribute to his outstanding service was given by DR. HASTINGS WALKER, medical director, and by Mr. J. Howard Ellis, of the Board of Trustees of Leahi, who presented a gold watch to Dr. Perlstein. Numerous leis and other gifts nearly smothered our genial friend and colleague. THE JOURNAL extends its congratulations to Bob and its best wishes for another twenty years of service.

Mr. Kent Longnecker, superintendent of the Kapiolani Hospital, was married to Miss Margaret Harshman, of Hanover, Pennsylvania, on December 3, at the Central Union Church. Miss Harshman was a nurse at Kapiolani and is a graduate of the School of Nursing of the University of Maryland. The bride was given in marriage by DR. LYLE PHILLIPS, and DR. FREDERICK GILES, the groom's brother-in-law, was the best man. Our congratulations to Kent and his bride, and may the business at his hospital show an increase in 1949 by his own efforts.

Several Honolulu physicians spoke at the third session of the Red Cross Disaster Nursing Institute meeting in December. DR. HARRY ARNOLD, SR. spoke on the medical aspects of atomic warfare; DR. ROGERS L. HILL outlined the treatment of shock and DR. C. M. BURGESS discussed the treatment of burns.

DR. LESTER F. YEE, a native of Honolulu, has returned to practice the specialty of general surgery at 1641 Nuuanu Avenue. Dr. Yee attended Punahou and the University of Hawaii before going to Harvard University Medical School. He was graduated there in 1937 and interned at the Massachusetts General Hospital, where he took his surgical training. In 1942 he was appointed as an instructor in surgery at Harvard. He served in the Army as a Major with the Harvard Unit of the 105th General Hospital, from 1942 to 1945. He later served as chief surgeon of the Sunmount Veterans Hospital, in New York. Dr. Yee is certified by the American Board of Surgery. He is a member of the Franklin County Saranac Lake Medical Society.

DR. MAURICE DE HARNE, of Wahiawa, has returned from an extended vacation on the mainland, during which time he visited at the Mayo Clinic, New York City and Montreal. In the latter city he visited a number of his relatives, necessitating practicing up on his French, which was very rusty. During his absence DR. KEITH KUHLMAN took over his practice, prior to beginning a mixed residency at the St. Francis Hospital in January.

DR. AND MRS. JOSEPH T. LUCAS, JR., of Wahiawa, became the parents of a son, William Braun, born at Wahiawa on November 26. He is their third child. The Lucas' have gone to their former home, Denver, Colorado, where Dr. Lucas is taking a course of surgical training under Dr. Kenneth Sawyer, who attended the Pan-Pacific Surgical Conference in Honolulu in September. Following this he will study at the Mayo Clinic before returning to the Islands in June.

DR. STEELE STEWART has returned from the mainland, where he attended the American College of Surgeons meeting in Los Angeles and delivered a paper at the meeting of the Western Orthopedic Association in San Francisco. His paper was on the subject of Congenital Clubfeet, in which he proposed new theories and evidence as to the cause of this defect.

DR. AND MRS. SHOYEI YAMAUCHI have returned from the coast where they attended the A.C.S. meeting in Los Angeles.

DR. JAMES MARNIE, surgical resident at The Queen's Hospital, was married on November 6 at St. Stephen's Church, Honolulu. His bride is Miss Dorothy Virginia Gust, of Denver, Colorado, who is a nurse in surgery at Queen's. Dr. Jack Marnie, local dentist, who is his brother, served as best man. DR. AND MRS. C. M. BURGESS entertained at their home with a reception following the ceremony.

DR. WALTER STRODE, an interne at The Queen's Hospital, was married in St. Louis, Mo. to Miss Nancy Carol Weller, of St. Louis, on November 5. Upon their return to Honolulu his parents, DR. AND MRS. JOSEPH E. STRODE, entertained at a reception at the Oahu Country Club.

DR. F. J. HALFORD has returned from attending a meeting of the Association of Military Surgeons in San Antonio, Texas and the meeting of the Western Orthopedic Association in San Francisco.

DR. JAMES M. BEEBE, formerly assistant professor of bacteriology at Creighton University, Omaha, Nebraska, has assumed his duties as assistant director of laboratories at The Queen's Hospital. He is supervisor of the clinical laboratory as well. Dr. Beebe, who is a native of Iowa, received his Doctor of Philosophy degree at the University of Iowa in 1941. He is a member of the American Association of University Professors and of the American Society of Professional Biologists, and other professional societies. He has contributed a number of scientific articles to medical journals, including work on bacterial cell structure.

DR. JOHN KOMETANI was accepted as a member of the American Academy of Pediatrics in November.

Interning at St. Francis Hospital for six months is DR. ROWLIN L. LICHTER, son of DR. AND MRS. MARTIN H. LICHTER of Honolulu. Dr. Lichter is a graduate of Northwestern University School of Medicine. Upon completion of his internship here in July, he will take a two-year internship at Cook County Hospital in Chicago.

Kauai

DR. C. O. MCCORMICK, professor of obstetrics at the University of Indiana, spoke to the members of the County Medical Society in November. His subject was "Obstetrical Helps."

DR. AND MRS. MARVIN A. BRENNECKE, of Waimea, have returned from an extended mainland trip, which included attendance at the A.C.S. meeting in Los Angeles and a visit at his home in Missouri.

DR. PAULINE STITT, Chief of the Bureau of Maternal and Infant Hygiene, visited Kauai and held conferences during the third week of November.

DR. R. NELSON HATT, of the Shriners Hospital in Honolulu, spent two days on Kauai holding orthopedic consultations.

DR. R. B. CLOWARD visited Kauai on November 17, holding neurological conferences.

Maui

DR. AND MRS. ROBERT F. COLE, of Puunene, are the parents of a son, James Arthur, born on June 25, 1948.

DR. AND MRS. GUY S. HAYWOOD, of Puunene, are the parents of a son, James Richard, born on July 26, 1948.

DR. AND MRS. JOSEPH E. FERKANY and their three children are now residents of Kula, Maui. Dr. Ferkany was graduated from the St. Louis Medical University. He has had post-graduate work in surgery at Wayne University, followed by three years surgical residency at the Herman Kiefer Hospital in Detroit, Michigan. He served in the U. S. Army Medical Corps in the Pacific area for five years. Dr. Ferkany is now associated with DR. EDMUND TOMPKINS at the Kula Sanatorium.

DR. VERNON K. S. JIM has opened offices in Wailuku, Maui, his home town, for the practice of general medicine. He was graduated from the University of Chicago School of Medicine in 1944. He was associated with the Manteno State Hospital, Illinois, followed by rotating internship at the Cook County Hospital in Chicago. He served in the U. S. Army Medical Corps from 1945 to 1947. He later served senior internship (surgery) at the Cook County Hospital, Chicago. He was on the associate staff at the Hilo Memorial Hospital in 1948.

DR. LEWIS E. SHAPIRO is on a prolonged vacation from the Hana Hospital, where he has been the superintendent. During his absence, DR. WILLIAM M. ALLEN will fill the vacancy.

Hawaii

DR. PHILIP CHOCK is on the mainland doing post-graduate work.

DR. JOHN JENKIN has opened an office for general practice in Hilo.

DR. FRANK E. DARROW has left to take a residency in surgery at the University of Oklahoma Hospital.

DR. C. L. CARTER and DR. L. FERNANDEZ have returned from trips to the mainland.

DR. N. AZZATO relieved DR. H. KURASHIGE of Naalehu who was on a mainland trip.

SPECIAL SOCIETIES

Honolulu Academy of General Practice

The speakers at the December meeting were DR. EDWIN K. CHUNG-HOON, who spoke on the subject of "Common Macular Eruptions Seen in General Practice," followed by DR. WILLIAM WALSH who spoke on "Trivia," a very interesting series of comments on everything from scabies to "cold shots."

In January the society was addressed by DR. CARL JOHNSON, anesthesiologist at the St. Francis Hospital, who spoke on the subject of "Choice of Anesthesia and Preparation of the Patient for Surgery."

The society is conducting a survey of fees as they exist amongst its members and this survey is uncovering some very interesting observations of the wide divergence of fees.

The president of the society is DR. ALVIN MAJOSKA and the secretary is DR. LESLIE VASCONCELLOS.

Hawaii Eye, Ear, Nose and Throat Society

At the November meeting of this society reports were given by several members on recent meetings of the Academy of Ophthalmology and Otolaryngology in Chicago, and on the A. C. S. meeting in L. A. These reports were given by DRS. PHILIP CORBOY, TADAO HATA and O. D. PINKERTON, of Honolulu, and DR. H. E. CRAWFORD, of Hilo.

These meetings are held monthly at the Pacific Club on the third Thursday of the month at 6:30 P.M., and are open to any physician who may wish to attend.

The president of the society is DR. HAROLD MOFFAT and the secretary-treasurer is DR. ROBERT WONG.

Honolulu Obstetrical and Gynecological Society

At the November meeting DR. C. O. MCCORMICK, professor of obstetrics at the University of Indiana Medical School, was the speaker. He presented an informal discussion of his methods of obstetrical practice, which was very well received by the 125 physicians attending.

The program of the December meeting consisted of the showing of the film "Physiology of Menstruation" presented by the Schering Corporation, which was followed by a discussion by the members on pertinent points relative to the matter of menstruation.

The president of the society is DR. FRANK C. SPENCER and the secretary-treasurer is DR. H. MCLEOD PATTERSON.

Honolulu Surgical Society

A meeting was held in November at the Mabel Smyth Auditorium at which a paper on carcinoma of the esophagus was presented by DR. JOSEPH E. STRODE, with a report of a successful high resection of the esophagus and anastomosis to the stomach above the arch of the aorta. Other speakers included DRS. DOUGLAS BELL and LYLE PHILLIPS who gave brief reports on the American College of Surgeons meeting in Los Angeles, and DR. LAURENCE WIIG, who mentioned his observations on a recent trip to various surgical centers.

RHEUMATIC DISEASE MEETING

The 7th International Congress on Rheumatic Diseases will be held in New York City, May 30 through June 3, 1949. Headquarters will be at the Waldorf-Astoria Hotel. This meeting precedes the annual meeting of the American Medical Association, which follows immediately in Atlantic City. For further details, see folder at office of THE JOURNAL.

SCHEDULE OF MEDICAL MEETINGS—1949

Weekly

MONDAY

11:00 A.M. Leahi Hospital. Staff Conferences. Meets daily through Saturday, 11-12. Case presentations. Open meeting.

12:30 P.M. Children's Hospital. Luncheon, and "Grand Rounds"; Case presentations and discussions. Open.

2:00 P.M. Kuakini Hospital. X-ray conference. Open.

TUESDAY

12:30 P.M. Kapiolani Hospital. Luncheon and meeting of resident staff. Open.

3:00 P.M. Queen's Hospital Pathological Conference for internes and residents. Open.

WEDNESDAY

12:30 P.M. St. Francis Hospital. Luncheon and Medical Seminar. Open.

1:00 P.M. Queen's Hospital Surgical Lectures and Conference—primarily for internes. Open.

THURSDAY

9:00 A.M. Queen's Hospital Clinico-Pathological Conference (at Mabel Smyth Auditorium). Open.

1:00 P.M. Queen's Hospital X-ray Conference for internes and residents. Open.

FRIDAY

4:30 P.M. Queen's Hospital Medical Conference for internes and residents. Open.

Monthly

FIRST MONDAY

12:30 P.M. St. Francis Hospital Surgical Lecture and Luncheon. Open meeting.

FIRST TUESDAY

12:30 P.M. St. Francis Hospital Surgical Rounds and Luncheon. Open meeting.

FIRST WEDNESDAY

7:30 P.M. Honolulu Academy of General Practice. Mabel Smyth Auditorium. Open. (Meets the Wednesday preceding County Medical Society Meeting—therefore occasionally the *last* Wednesday of month.)

FIRST THURSDAY

12:30 P.M. Kapiolani Hospital Medical Executive Meeting. Closed.

12:30 P.M. Kuakini Hospital Surgical Conference and Luncheon. Open.

FIRST FRIDAY

7:30 P.M. Honolulu County Medical Society Meeting. Mabel Smyth Auditorium. Open.

SECOND MONDAY

12:30 P.M. St. Francis Hospital Medical Rounds and Luncheon. Open.

SECOND TUESDAY

Maui County Medical Society.

SECOND WEDNESDAY

Kauai County Medical Society.

7:30 P.M. Honolulu Society of Neurology and Psychiatry. Mabel Smyth Auditorium. Open. Alternate months: (February, April, June, August, October, December).

SECOND THURSDAY

12:30 P.M. Children's Hospital Executive Committee Meeting. Closed.

SECOND FRIDAY

5:15 P.M. Kuakini Hospital General Staff Meeting and Dinner. Open. Make reservations before Thursday.

7:30 P.M. Leahi Hospital Sinclair Club, for diseases of the chest and tuberculosis. Open.

SECOND SATURDAY

1:30 P.M. Hawaii Dermatological Society meetings. Place to be announced. Open. (February, May, August, November).

THIRD MONDAY

12:30 P.M. St. Francis Hospital Obstetrical and Gynecological Lecture, and Luncheon. Open.

7:30 P.M. Honolulu Obstetrical and Gynecological Society. Mabel Smyth Lounge. Open.

THIRD TUESDAY

12:30 P.M. St. Francis Hospital Obstetrical and Gynecological Rounds and Luncheon. Open.

THIRD WEDNESDAY

12:30 P.M. Kuakini Hospital Medical Conference and Luncheon. Open.

THIRD THURSDAY

12:30 P.M. Kapiolani Hospital Staff Meeting and Luncheon. Open.

6:00 P.M. Honolulu Pediatric Society Meeting and Dinner. Closed—members and guests.

7:30 P.M. Honolulu Eye, Ear, Nose and Throat Society. Open.

THIRD FRIDAY

12:30 P.M. St. Francis Hospital Staff Meeting and Luncheon. Open.

7:30 P.M. Honolulu Surgical Society. Alternate months (January, March, May, July, September, November). Mabel Smyth Auditorium. Open.

FOURTH TUESDAY

12:30 P.M. St. Francis Hospital Tumor Conference. Luncheon. Open.

FOURTH THURSDAY

12:30 P.M. Queen's Hospital Visiting Staff Conference. Luncheon. Open. (No clinico-pathological conference this A.M.)

FOURTH FRIDAY

12:30 P.M. Children's Hospital General Staff Meeting. Luncheon. Open.

Quarterly

Children's Hospital Clinico-Pathological Conference and dinner. Notices sent to staff members.

Annually

First Weekend in May. Hawaii Territorial Medical Association meeting; this year in Honolulu, May 5-8.

Stated Intervals

Hawaii County Medical Society.

Miscellaneous

FIRST AND THIRD TUESDAYS

1:00 P.M. Queen's Hospital Tumor Clinic. Cancer study and education, as well as patients for diagnosis and consultation.

THIRD OR FOURTH TUESDAYS

4:30 P.M. Honolulu County Medical Society Board of Governors meets at Mabel Smyth Building one week preceding the Tuesday before the County Medical Meeting. This is open to all members of County Society.

N.B.—Have your secretary cut this page out and keep for reference throughout the year. Also, have her check your appointment book with these dates for the next month, and try to attend more meetings this year. By a concerted effort it is possible to get a good deal of post-graduate medical education in the course of a year. At the smaller conferences and seminars much basic knowledge is presented from which most practicing physicians would profit. Practically all meetings listed are open to interested physicians, except the executive committee meetings, which are listed so that you may refer matters to them for action at the given dates. Service physicians and visiting physicians are invited to attend these meetings and to partake in the discussions.

Any corrections or additions to this schedule should be submitted to the editorial office of THE JOURNAL.

NEW POLIO OFFICE

The Honolulu Chapter of the National Foundation for Infantile Paralysis has opened a full-time permanent office in the new Leilani Building at 1639 Kapiolani Boulevard. The telephone number is 992411.

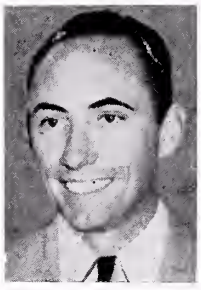
In charge of the office is Miss Carolyn Kingdon, who has been affiliated with the New York Headquarters of the National Foundation for the past eight years. Miss Kingdon was granted a leave to assume the position of Executive Secretary of the Honolulu Chapter. Chairman of the Chapter is John C. Linczer.

Physicians interested in fellowships are invited to examine the Foundation's material on this subject at the Association's offices.

AMERICAN COLLEGE OF PHYSICIANS

The American College of Physicians will conduct its 30th Annual Session at New York, N. Y., March 28 through April 1, 1949. Dr. Franklin M. Hanger, Jr., of New York City is the Chairman for local arrangements and the program of Clinics and Panel Discussions. The President of the College, Dr. Walter W. Palmer, Director of The Public Health Research Institute of the City of New York, Inc., and Professor Emeritus, Columbia University College of Physicians and Surgeons, is in charge of the program of morning Lectures and afternoon General Sessions.

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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NURSING CARE STUDY ON ACUTE AND CONVALESCENT RHEUMATIC FEVER

CAROL P. GILL, R.N.

MANY cases of rheumatic fever in children are cared for in the home by members of the child's family. Add to this, the number on hospital medical wards and in convalescent homes, and the sum will be a staggering one. Because of the high incidence of rheumatic fever, it behooves all nurses to review the nursing care of these children who, with proper care, will grow to be contributing members of tomorrow's society.

Acute Rheumatic Fever

In most instances the child acutely ill will be cared for in the hospital, for here are facilities for emergency stimulation, oxygen therapy, and other equipment needed for adequate treatment.

Clinical Picture

Upon admission, initial observation for dyspnea, cough, pallor or cyanosis of the lips, cheeks, or fingernails is accurately recorded. The pulse may vary in rate, rhythm, and pressure. Any irregularities are noted and reported. Because of cardiac damage, there may be an edema of the abdomen, liver tenderness; any abdominal distress is noted.

One of the most common complaints of the child will be pain in the joints. Some children may say nothing, but hold an extremity flexed, and a slight swelling may be noticed about the joint. Often the joint will be reddened and inflamed. The appearance of the skin may be normal. Some children develop a rash during high fevers, such as may accompany rheumatic fever. Salicylates, frequently used in treatment, may produce a rash. Sometimes rheumatic nodules may appear over bony prominences. These may be large or small. They are subcutaneous in nature and if the skin is lightly pulled over the bony prominence the nodule may be more easily felt than seen. Bring these to the attention of the physician if he has not already discovered them as they may appear quite suddenly.

To a child with a recurrent attack of rheumatic fever, epistaxis is usually familiar, but to the child who has never before experienced it, it is most alarming. Comfort the child, reassure him, and carry out instructions for controlling the epistaxis. Stand-by emergency orders should be obtained before such occurrences. If ordinary methods do not stop the bleeding, the physician should be notified at once.

Closely associated with rheumatic fever is chorea. Observe closely for any unsteadiness or incoordination. This may be accompanied by irritability.

Rest

Rest is the most important consideration for the child and with our nursing care schedules, we may find it difficult to care for the active rheumatic case. The child may be asleep when temperatures are being taken elsewhere on the floor, and may feel too tired to eat at tray time. However, it must be remembered that in the acute stage, rest and quiet come above all floor schedules and routine. The temperature may be taken later and the fact recorded. The child should rest twenty minutes before pulse and respiration are taken so the true physiological needs of the body

are more truly indicated. Hold the child's hand in a comfortable, relaxed position when taking the pulse. Take time and count it one full minute, noting rate, rhythm and pressure. Sometimes it will be necessary to take an apical pulse two or three times during the day if all the pulsations are not reaching the radial artery. Temperature, pulse and respiration will be taken every four hours.

Drugs

Acquaint yourself fully with the medications the child is receiving and the possible effects on the pulse and respiration. One of the most common drugs used is salicylates. In addition to the rash mentioned earlier, dizziness, ringing in the ears and nausea may occur. Some children develop acidosis. They appear drowsy and a change in respiration occurs, usually a slowing, some may even go into a stupor. Most children, fortunately, tolerate the drug. It serves to relieve the joint pain and reduce the fever.

Other drugs that may be used are diuretics, employed to relieve edema. A form of digitalis is frequently given if cardiac failure is present. Note especially the rate of pulse if this drug is administered. It serves to slow the rate, and one below 65 should be reported unless the child is known to have an unusually slow pulse normally.

Because of poor circulation, the checking of intake and output is necessary to secure an indication of the heart function. If there is serious failure, the fluid intake may be limited and decreased. A record must be available in order to assure that all personnel on the floor giving nursing care to the child will know what the limit is and when fluids are to be offered.

Defecation should be voluntary, but if not, a slow gentle tap water enema may be given if the physician approves. When on complete bed rest, the child should be lifted on and off the bed pan.

If the child is seriously ill, there may be no diet ordered and nourishment will be given parenterally for a few days until the child has strength enough to eat. Then there is a graduation from liquid to general diet as the child will tolerate it. He may eat slowly and should not be hurried. If permissible, a child may feed himself, but if on complete bed rest he will need to be fed. This period would be a good time to introduce new foods. Nourishing, easily digested foods, as milk, eggs, well-cooked meats, fruits and vegetables should compose a large part of the diet.

An acutely ill child is seldom weighed. If the child has not been followed from birth by a private physician or a clinic, the normal weight if needed, might be obtained from his school physical record.

Oxygen

In cases of severe dyspnea, oxygen per nasal catheter or in an oxygen tent may need to be administered. Frequently, the older child will be most comfortable in the dorsal recumbent position. The oxygen tent must be large enough to permit the bed to be raised and provide room for nursing care to be administered inside the tent. A transparent tent through which the child can see will relieve a great deal of apprehension. To prevent chilling, a little cotton flannel hood may be made to fit over his head and ears, and tie under his chin. Similar little jackets or robes are less bulky than blankets and much more comfortable for the child. A word of caution might well be added here in regard to electric heating pads. Although they are lighter in weight and more convenient than hot water bottles, they should not be used because of the safety of the child. The danger of an electric spark or short inside an oxygen tent is too great to permit use of electrical equipment. A hot water bottle can be used if tested to be below 110° F. It is covered with a cotton protector and changed when cooled. It should be so placed that the child does not have to support the weight of the bottle.

The dorsal recumbent position can best be maintained if the child has a foot rest which will place his feet at right angles to his legs. A soft roll is placed under his knees to permit his legs to rest in about a 5° angle of flexion. The bed clothes should not be tight and binding, but should fit snugly under the arms or over the thighs, wherever the edge of the tent will be to prevent the escape of oxygen. The lower bed clothes can be pulled over the foot rest and the body will not have to support the weight of the bed clothing. By leaning forward on a pillowed bed-table the child with orthopnea may be most comfortable.

If nasal oxygen is used, precautions must be taken to prevent the child from removing the catheter or pulling it up to the pharynx and gagging. It may be necessary to restrain his hands by wrist restraints that are tied to the springs or lower support of the bed so the child will not be able to move his arms up and down.

Activity

Activity is necessarily limited and in many acute attacks, everything that can be done to conserve his energy and lessen the demand on the heart is done for him. The child may have no desire for

activity when acutely ill and so presents no problem, but for the child who does not understand why his activity must be limited, diversion that will relax the child and demand his attention as story telling, reading aloud, or playing music will assist in quieting and interesting him.

With treatment and rest, the rheumatic activity will begin to subside and gradually activity for the child can be increased. As he improves he enters the phase termed, "Convalescent Rheumatic Fever."

Convalescent Rheumatic Fever

In November, 1947, our Rheumatic Fever ward was opened in Kauikeolani Children's Hospital. There had been many cases of rheumatic fever admitted and cared for in the hospital previously, but it was felt that the care was inadequate for the convalescent rheumatic. The capacity of the ward that was set up was 13. As an indication of the need for the ward, the average yearly census during the past year was above 12.5. The actual number of patients cared for during the year was 47.

The ward and the equipment are set up by the hospital; much of the care and treatment is financed by the Bureau of Crippled Children.

Children who are admitted to this ward usually have a Westergren sedimentation rate above 25mm/hr. and are over the most acute phase and have been established as convalescent rheumatic fever cases.

At this stage the children seldom have joint pains, dyspnea or rashes. An occasional nodule may be felt or seen.

Program of Care

The temperature, pulse and respiration are taken four times a day unless there is an elevation and these are taken during the night also. One night a week, two sleeping pulses and respirations are taken on all the children.

The trays are prepared in the diet kitchen and carry a card bearing the child's name, ward number and type of diet, designated by the color of the card. Most of them are on regular diets when they enter the ward. They receive mid-morning, mid-afternoon and evening nourishment usually in the form of fruit juices and crackers. Children on regular diets are given extra servings after they have eaten all the first serving. The birthday of each child is celebrated in some manner and it may be possible for the parents to arrange to bring food at a time like this if all the children in the ward are to participate.

Each child bathes himself. His back is washed by the nurse with soap and clean water, dried and rubbed lightly with alcohol and powder. They are given a clean drawsheet, towel, wash cloth and pajamas each day. Their entire bed linen is changed twice a week, barring accidents.

On week-days school begins immediately after the bath. The instructor is a well qualified teacher from the Department of Public Education. If no information is sent to her from the school the child was attending, she determines his progress and begins her instruction at this point. Her duties are very like a country schoolteacher in that she has children of all ages and all grades. Many children have come into the ward retarded greatly because of their illness, and with the individual attention she is able to give, have become interested in learning and have progressed very rapidly.

The tray table is used as a desk and the back rest is raised. Sometimes the children prefer to sit against the wall with a pillow at their back. Footrests have not been used on the ward as the children seldom lie in a prone position unless sleeping. They are active during the day and when necessary, passive massage is employed to keep up muscle tone. There is no record of any footdrop developing among these children.

Bed making is accomplished between instruction periods and the top bed clothing is folded to the foot of the bed. A folded nap blanket is placed on top. On Monday, the children are weighed after the bath and have their hair shampooed if it is not too cold and they show no signs of a beginning cold. If pediculosis is found, the condition is treated when the children are first admitted to the hospital. This initial treatment may not have been sufficient so there is a constant vigilance for nits. Children with heavy hair often have the treatment repeated two or three times.

The instruction period lasts until lunch time. Temperatures are taken and trays are passed, again followed by medications.

In order to establish regularity among the children and eliminate the necessity of enemas, a time for defecation was established after lunch time. This has been very successful and the enema trays are now rarely used on this ward.

The children have a rest period of two hours, from noon until 2 p.m. All the departments in the hospital have come to respect this period. No laboratory work or X-ray is done, no one comes to repair a drippy faucet, and even the switchboard rings only when it is extremely important. Most of the children are able to sleep. If some do not fall asleep they are cautioned to remain quiet and

permit the other children to rest. This frequently takes a little reminding, but all new children on the ward quickly become accustomed and observe the rest period.

Recreation

On warm, sunny afternoons, the children are wheeled to the sun lanai on their beds. Those who are ambulatory may walk outside and others may be allowed up in wheel chairs. They enjoy playing group games or singing. Each child is to stay on his own bed as this prevents a great deal of hopping back and forth with resulting overexertion for the child. It is here that the parents visit the children at a distance of ten to twenty feet. This precaution is taken to prevent the children from coming in contact with upper respiratory and any other infections to which most of them are very susceptible.

All personnel on the ward, nurses, doctors, aides, orderlies, laboratory technicians, repair men and even the children themselves, must have negative throat cultures before they can enter the ward. All personnel with colds or other upper respiratory infection stay off the ward until they have had a negative throat culture. Any child with an acute infection that demands special treatment or may be infectious is transferred from the ward. One reason is that he is unable to enter into activities on the ward such as schoolwork and may have treatments that distract other children. Another reason is to remove a source of infection that might be transmitted to others on the ward, and because it is a convalescent ward, the children may be too noisy for the best treatment of a child who is not feeling well.

On the days and afternoons the children do not have school, organized and directed occupational therapy by a registered occupational therapist occupies the children with activity that will not put strain upon the heart, such as making paper leis; painting, chalk and pencil work; weaving; braiding leather and plastics; making stuffed animals; knitting and making party and ward decorations, and holiday decorations for diet trays on special occasions. A great deal of the material is furnished, but some of it must be purchased by the child if he wishes to use it. There is also a library of children's books available to them and a small library of records.

The children are permitted to have radios. "Music by Muzak" is available on the ward and is used at times when it does not interfere with other activity. This music is used to a great extent in the evening hours after supper and before bed time. Frequently the children play group games, that will serve to quiet them before they go to sleep. These games are followed by back care as was given with the morning bath. Rarely do the children need sedatives for sleeping.

A daily schedule for each child for a period of a week is placed on his chart. The activity planned is written in by various members of the staff who plan the activity program. This has proved of greatest benefit in orienting new personnel who come to the floor and in correlating activities of all departments engaged in the care of the children.

Discipline

One of the biggest problems on the ward is that of teaching the children to limit activity and the closely associated problem of discipline in order to assure restricted activity. While it is important to have discipline in order to accomplish the work to be done on the ward, the more important reason is to limit exertion of the children. The child who is allowed to shout and swing from the edge of his bed all day cannot hope to progress as rapidly as the child whose activities are of a quieter nature. Many of the children have little sense of responsibility, and discipline must be enforced by adults. Discipline on the ward is enforced with a positive approach. The child is told what he can do rather than what he cannot do. If occupied with activity that demands his attention without demanding too much from his heart, he has little time to engage in prohibited antics.

It becomes necessary at times to restrict privileges. The child is informed of his wrong doing and why the privilege has been removed. Often the social approval of the group in the ward will serve to keep the child "in line." Unfortunately, this principle of discipline works in reverse, for he may receive more attention if noisy and uncooperative, then when he is behaving well. One of the agreements among the personnel on the ward is that restriction placed on a child shall be carried out by all personnel. The children know this and have even been known to inform members of an oncoming shift if the nurse has failed to relay the information. We do not pretend to be authorities on child behavior and discipline. Our principle is to be as democratic and fair with the children as possible and above all to be honest with them. Their treatment and progress are our first consideration. All else comes second.

The ward is built with three double cubicles on the side of the aisle and three double cubicles and one single on the other side. The windows are under the eaves above the eye-level of the

children on the sides of the ward and are at eye-level on the end wall. By opening and closing these windows it is possible to keep the room well ventilated at all times. The one difficulty is heating in the winter time, as it is an open ward and difficult to heat with electric heaters. The children are given extra blankets and night rounds are made frequently to be certain they are well covered. Especially on cloudy days, daylight is not sufficient for studying. Each child has a fluorescent light suspended above his bed that supplies adequate light for reading and working.

The cubicles are provided with privacy during rest hours by colorful curtains that are easily drawn and are washable. They were presented to the ward by a group of club women who have shown a keen and active interest in the ward, and have done a great deal to provide the children with the "extras," books, games and parties.

Because it is meeting such a great need and is the first such project in the territory, the ward should receive rather wide publicity. When pictures are to be taken it is necessary to obtain written permission from the parents for pictures of their children to be printed.

Social and Economic Aspects

The medical-social service department obtains social histories of the children that are useful to the physician in aiding his diagnosis and treatment. Very often a mood of depression displayed by a child may be explained by information the social worker has supplied about the home conditions of the child. It thus helps the nursing staff to understand the child. This information becomes especially important when the child is to be discharged from the ward. A thorough investigation of the home, social, physical and economic must be made with a clear understanding by the social worker of the activities that will be allowed the child if he is sent home. Will he have a bed to himself? If not, how can one be made available? What are the bathing and toilet facilities? Are there any steps for him to climb? Will he go to school? Will he walk or ride? Will all his classes be on the ground floor? Will he have hot lunches or will he go home for lunch? Will his diet be adequate? Is the area where he lives too damp? Is there an acceptance by the parents of the limitations under which the child will be? Are they willing to cooperate with the treatment outlined for the child when he is discharged? Would it be better to send the child to a foster home?

These are but a few of the questions that must be satisfactorily answered before the child is discharged. Specific instructions must go home with the mother. She should be given a schedule of activities for the day. A list of good foods and a few menus would be very helpful. The medications, if any, are sent home. The mother must know how to administer them and when. If the child is to be sent home on sulfa, she must be advised about the need of increased fluid intake and must be warned to watch for any red-tinged urine. She must know when her child is to return for a check-up. She must be cautioned of the dangers of reinfection and of a recurrent attack that may follow. She must be acquainted with the activity which the child is allowed and should receive some suggestions as to how she can plan to occupy the child. Prevention has been mentioned but it must be stressed. The importance of keeping the child away from crowds, drafts, and people with upper respiratory infections, needs to be stressed.

It is most fortunate if the parents have an optimistic outlook and do not show their child morbid attitudes about his prognosis. Many of these attitudes may be difficult to change, so it is important that the nurse be optimistic and interested and endeavor to impart a bit of this feeling to the parents. The other extreme may exist, wherein the parent sees his child as a physical specimen uncrippled in appearance and refuses to believe a little activity now and then will hurt him and is unwilling to cooperate with directed treatment. These people may be won if they are given some instruction regarding rheumatic fever.

These problems must be met and suitably worked out if there is to be successful treatment of the convalescent rheumatic fever child. The nurse must acquaint herself with the nursing problems to be solved, in each case a bit different, and work cooperatively with all to meet the challenge and by so doing, "give rheumatic hearts a chance."

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FOLLOW UP CARE FOR THE RHEUMATIC CHILD

ANGIE CONNOR, M.D. *
and
JEANNETTE BEDWELL, P.H.N. †

THE child who has once had an attack of acute rheumatic fever has embarked upon a "rheumatic career," with all its dangers of recrudescence of infection and progressive cardiac damage. In order to minimize the likelihood of repeated rheumatic episodes and subsequent chronic heart disease, the post rheumatic child must be followed very closely. This follow-up should be directed toward three goals: first, regulation of environment; second, good nutrition; and third, prevention of certain bacterial infections which act as the trigger mechanism for rheumatic episodes and subacute bacterial endocarditis.

Often the routine of the home has to be modified to provide a relatively calm and secure environment for the rheumatic child. Healthful living conditions, first and foremost, demand an understanding attitude on the part of the parents and other members of the family. Provision needs to be made also for the best possible physical conditions in the home. The services of the medical social worker may be used here to ameliorate any emotional tensions, as well as to point out, and, if necessary, to help arrange for adequate sanitary facilities and sufficient space to alleviate overcrowding. The services of the public health nurse are also invaluable, not only in helping interpret the physician's findings and recommendations to the family, but also in assisting them in carrying out measures that will maintain the proper familial attitudes and a suitable physical environment over a prolonged period of time.

The best possible diet is a prime consideration in the care of the rheumatic child. Although it has been well shown that no specific nutritional factor is paramount in importance, nevertheless a diet which provides all of the dietary elements, and is high in protein and vitamins is essential for rheumatic children. In fact, it has been demonstrated that recrudescences of rheumatic fever can be decreased by optimum diet alone. The continued efforts of the nutritionist, the public health nurse and the medical social worker are all necessary to educate the family in the nutritional requirements of the child, and to help make the proper food available, if the family cannot provide it.

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In addition to the necessity for a good mental and physical environment and an optimum nutritional status to keep the rheumatic child well, there is another factor which is of vital importance. The prevention of respiratory infections, particularly those caused by the hemolytic streptococcus, is essential, since these infections often precede rheumatic flareups. Fortunately, we have at present relatively cheap and safe therapeutic agents, sulfonamides and penicillin, which when given in small daily doses help prevent the implantation of streptococci in the post-rheumatic child and thus minimize rheumatic recurrences. Such prophylaxis necessitates regular visits to the physician for careful supervision. Medical investigators report an astounding decrease in the number of subsequent rheumatic attacks when these drugs have been employed.

Besides the need for close medical supervision when chemo-therapeutic or antibiotic methods are employed to reduce the chances of recurrent rheumatic infections, regular visits to the physician are necessary in order that he may supervise the general health of the child, and advise parents, public health nurses, teachers and others interested in his care as to his progress. The physician, during these visits, constantly searches for any evidence of rheumatic activity, or any sign of cardiac disability, for only by careful watching can he recognize rheumatic activity early, and place the child at bed rest before more cardiac damage ensues. Just as the physician in recent years has emphasized the early detection of rheumatic activity and the prevention of rheumatic recrudescences, so it is necessary that nurses, parents, teachers and others turn their attention away from heart murmurs and the restriction of activity to an awareness of the signs and symptoms of the onset of a rheumatic infection. The child himself should be helped to develop a sense of responsibility for avoiding infection, and for living as normal and independent a life as possible. The average rheumatic child can partake of all the normal activities of childhood, with the possible exception of competitive sports, when the rheumatic infection is quiescent. If, on the other hand, the rheumatic infection is active, the child should be at complete bed rest.

In summary, good after-care of the rheumatic child involves a long-term period of close supervision of his environment and his dietary habits. In addition, every effort must be made to keep him free from respiratory infections, and his medical supervision must be geared to detect the earliest evidence of recurrent infection. This is a task which involves not only a physician-patient

relationship, but also the cooperative teamwork of the family, nurse, teacher, social worker and others.

In an effort to meet the needs of children with rheumatic fever, including the three prime objectives of long-term follow-up, there has recently been established a rheumatic fever program in the Territory of Hawaii. This program, made possible by a grant of federal funds, is administered through the Bureau of Crippled Children of the Territorial Health Department. At present, the program is limited to the Island of Oahu, but it is hoped that it may later be expanded to meet the needs of rheumatic children throughout the Territory. By the cooperation of the Kauikeolani Children's Hospital, The Queen's Hospital, the medical profession, and the Bureau, a convalescent ward for the care of children with rheumatic fever has been set up at Children's Hospital, and rheumatic fever clinics are held at The Queen's Hospital Outpatient Department. The services of consultant pediatricians and cardiologists are available, along with the services of public health nurses and medical social workers, in a coordinated effort to help the rheumatic child avoid crippling heart damage due to rheumatic fever.

HISTORY OF THE HAWAII LEAGUE OF NURSING EDUCATION

For several years before the formation of the Hawaii League of Nursing Education, the Education Committee of the Nurses' Association, Territory of Hawaii was called upon for help in matters regarding nursing education. The Board for the Licensing of Nurses did not have the authority nor the personnel to survey and advise schools of nursing. Therefore this Committee was often called upon to carry out such functions. When Miss Valentine came to survey schools for accreditation and to help the Board for Licensing in setting up the machinery for licensing and accreditation under the revised Nurse Practice Act, the need for help from those engaged in nursing education and directly representing the education as programs themselves became apparent. Nurses, now members of the League, served on various advisory committees at the request of the Board. At the time, problems arose which revealed the need for a continuing organized group to study and make recommendation on problems which involved coordination of efforts of all those engaged in nursing education such as recruitment, most effective use of affiliation facilities, university programs, and the like.

At the instigation of Mrs. Mildred Pinner, the first president, an organization meeting was called at the University of Hawaii to which more than 40 nurses responded. From that meeting, committees continued the work of setting up the organization. It was officially recognized at the National League's annual meeting in Seattle in September 1947, with Mrs. Pinner accepting the recognition in true Hawaiian manner.

The Board for Licensing of Nurses and the Nurses' Association, Territory of Hawaii already had and would continue to have problems to throw in the lap of this newly organized group, so it was only natural that the Nurses' Association should ask the Hawaii League of Nursing Education to officially serve as its committee on Nursing Education which it consented to do and has done.

This sensing of a need, the joining together of experts to meet the need, and the recognition of the group as a consultant on educational problems by other associations reveals the "growing up" of nursing Hawaii.

VIRGINIA A. JONES

At the November 17 meeting of the Hawaii League of Nursing Education, the membership voted to send to the Inter-Island Nurses' Bulletin the following letter of appreciation to Charter Members and to the first president, Mrs. Mildred M. Pinner.

The Hawaii Chapter of the National League of Nursing Education has passed its first birthday.

On January 20, 1947 our first meeting was held for the purpose of organizing this chaper. At that time there were 40 members in the Territory. Our formal acceptance into the National League took place September 8, 1947 at the 51st Annual Convention of the N.L.N.E.

Because of good leadership, we are now well established and are ready to take our place in the community as an integral part of the nursing program.

At this time may we express our appreciation to our first president, Mrs. Mildred Pinner, and to all others who assisted her in making this project successful.

Board of Directors
Territory of Hawaii
League of Nursing Education

Attention: Directors, Instructors, Supervisors, Headnurses, Public Health Nurses and those engaged in Nursing Education.

Dear Teammates and Prospective Teammates:

The Hawaii League of Nursing Education has just passed its first birthday. The team has worked well together but needs more members. It serves as the Edu-

cation Committee of Nursing in the Territory and we need every person eligible to work with us in order to make nursing in Hawaii what it should and can be.

Won't you join us? Find out how you may join from your Director of Nursing or write us at League Headquarters, Mabel Smyth Building, Honolulu. Teammates, pass on the information to all of those nurses whom our by-laws and constitutions state may be on our team.

"Any nurse, (1) holding an advisory, executive, teaching, supervisory, assistant supervisory, head nurse or assistant head nurse position in an educative or preventive organization or in a government service employing nurses or (2) holding a position as director of nursing service in a hospital without a school of nursing or (3) holding a position as administrator or instructor in a school of practical nursing approved by the legally authorized state accrediting agency or the National Association for Practical Nurse Education."

We pay a membership fee of $7.00 which we consider is a small investment in comparison to the satisfaction received.

For the year 1949, shall we set our goal to enroll all eligible members, place them in whatever position they best qualify on this team and work together to accomplish some definite goals for the year to come?

Are you doing your best, teammate?

Yours for a successful year in nursing,

ANNE M. FISHER, *President*
Hawaii League of Nursing Education

THE HAWAII LEAGUE OF NURSING EDUCATION OF TODAY

Miss Anne M. Fisher presided at the meeting of the Hawaii League of Nursing Education on Wednesday, November 17 at Mabel Smyth Auditorium. A delightful program of entertainment was provided by the dramatic students of McKinley High School and by the student nurses of St. Francis Hospital School of Nursing. Following the program, mimeographed copies of the by-laws were distributed and a general discussion on the organization, aims and activities of the Hawaii League of Nursing Education was held.

Officers and committee members appointed for the coming year include:

President: Miss Anne M. Fisher.

Vice-President: Mrs. Arlene Thompson.

Secretary: Miss Miriam Keller.

Treasurer: Miss Jeanette Seo.

Board of Directors: Sister Walter Damien, Miss Virginia Null, Miss Alison MacBride.

Curriculum Committee: Miss Annetta Bilger, Chairman, Sister Mary Albert, Miss Anne Chang, Miss Esther Conroy.

Membership and Eligibility: Mrs. Rae Keleher, Chairman, Miss Virginia Null, Mrs. Ruth Jacot, Mrs. Margaret Makekau, Miss Marjorie Namiki.

Measurements, Educational Guidance and Recruitment: Sister Mary Albert, Chairman, Miss Mildred McFerren, Mrs. Mildred Pinner, Mrs. Arlene Thompson, Miss Jean Ono.

Arrangements, Program and Publicity: Miss Elsie Ho, Chairman, Mrs. Anice Olson, Sister Mary Laurine, Miss Arlene Sprunger, Miss Alison MacBride.

Executive and Finance: Miss Jeanette Seo, Chairman, Sister Marie Therese, Mrs. Patricia Rocha, Mrs. Luella Kunkel.

Revisions: Sister Walter Damien, Chairman, Miss Inez Lange, Miss Alice Shida.

INDUSTRIAL NURSE SECTION

The bi-monthly meeting of the Industrial Nurse Section was held November 9 at Mabel Smyth Building. Dr. Y. T. Wong spoke on "Mental Hygiene," a subject of much interest to the nurse in industry.

Officers elected for the coming year: President, Mrs. Lois Bell (Liberty House); Vice President, Miss Margo MacDermid (Oahu Transport Company); Treasurer and Corresponding Secretary, Miss Mabel Cadonau (Inter-Island Steam Navigation Co.); Recording Secretary, Miss Virginia Doyle (Libby, McNeill and Libby); Program and Entertainment, Miss Millicent Larsen (Honolulu Rapid Transit Company).

Guests are always welcome at Section meetings.

RED CROSS DISASTER NURSING INSTITUTE

The Hawaii Chapter of the American Red Cross is in the process of recruiting nurses for community service under the new Red Cross enrollment plan. The principal objective of this new plan is to provide greater benefits to each community through the service of Red Cross nurses in peacetime health programs as well as in disaster. The old and now discarded nursing program which maintained a reserve of nurses for the army and navy is no longer necessary since the military services now have their own Nurse Reserve Corps.

To enable nurses to qualify for enrollment, and also to provide a refresher course for nurses already enrolled, a Red Cross Institute for Disaster Nursing was recently held at Mabel Smyth auditorium. Future planning includes periodical institutes on various subjects of interest to nurses. The first four sessions were attended by 143 nurses.

DIAMOND JUBILEE REVIEW

Observance of Nursing Progess Week and Linda Richards Day in Hawaii served to bring

together in enthusiastic interest a large number of nurses and other members of the community who could well review with pride a history of achievement in nursing in the Territory during the past 75 years. As elsewhere throughout the nation, all Island district associations carried out programs of tribute to those nurses who had made this history possible.

The Maui and Hawaii Associations held banquets on Linda Richards Day and the Kauai and Honolulu Associations held receptions. Newspapers on all the islands were generous with publicity and an island-wide radio program depicting the life of Linda Richards was presented by Station KHON.

Nurses especially honored at the Maui program were Mrs. Lei Robinson, Mrs. Corrine Freeman, Mrs. Miriam Schmidling, Miss Beatrice Fujimoto, Mrs. Mary Dunn, Mrs. Anne Gillin, Mrs. Gloria Foster, Mrs. Margaret Weight, Mrs. Modesta Singlehurst, Miss Louise Anderson, Mrs. Margaret Kinney, Mrs. Molly Martin, and Mrs. Lily Robertson. Several of the pioneer nurses gave entertaining reminiscences of their early experiences on Maui. Miss Dorothy Gray and Miss Isabelle Chung were in charge of the program and Miss Eileen MacHenry, publicity.

Hawaii District Association charter members especially honored were Mrs. George Lowson, Miss Margaret Campbell, Mrs. V. Marcallino, Mrs. Ethel McGuiness, and Miss Helen Gorsuch. Miss Roberta Lindberg, supervisor of nurses at Hilo Memorial Hospital, presented an account of the dramatic growth of the nursing profession; Miss Winifred Golley, supervisor of Public Health Nurses on Hawaii, brought out the accomplishments of the public health service. Plantation nursing evolution was presented by Miss Annette Hammersland of the Hilo Sugar Company. Miss Mary E. Stanley of Puumaile Hospital was in charge of the program, assisted by Mrs. Lowson, Miss Moira Wilson, and Miss Lindberg.

Ten of Kauai's eleven charter members were guests of honor at a reception: Mrs. Claire Carra, Mrs. Martha Coney, Mrs. Josephine Cortezan, Miss Thelma Hensley, Mrs. Doris Hiramoto, Miss Mary Kaiser, Mrs. Miyoko Masunaga, Miss Mabel Wilcox, Miss Edith Weatherburn, and Mrs. Lillian Yamada. Mrs. Anne Clapper, another charter member was unable to attend.

A play built around the story of Linda Richards, written and directed by Miss Elizabeth Middleton, superintendent of Wilcox Memorial Hospital, climaxed the evening. Miss Ruth Pekkla, Miss Virginia Sellers, and Miss Edith Hinchcliffe took part in the production.

In Honolulu a 200-voice student nurse chorus presented a program in the Mabel Smyth Memorial Building on the afternoon of November 16 for intermediate and high school girls who are interested in nursing, and in the evening for the general public. Approximately 1,000 people were present for the two performances and to attend the reception in the evening.

Charter members honored were Mrs. Julia King, Mrs. Jane Sinclair, Miss Teresa Malcolm, Miss Mary Merrill, Miss Alice Arnold, Mrs. J. T. Wayson, and Mrs. Olive Sill Hinman.

Exhibits of nursing school pins and caps attracted much attention as did exhibits of hobbies, photographs, nursing treatment equipment, books, and dolls dressed in replicas of historical nursing costumes. Two department stores arranged special window displays and the Library of Hawaii had a special exhibit of books on nursing.

Mrs. Esther Stubblefield, general chairman, was assisted by Miss Elsie Ho, Miss Olga Larson, Mrs. Myrtle Schattenburg, Mrs. Amelia Garcia, Sister Walter Damien, Mrs. Rose Yuen, Miss Bernadette Yoshina, Miss Jeannette Seo, Miss Marjorie Namiki, Miss Eleanor Enomoto, Mrs. Miyoko Azuma, Miss Alma Whitman, Mrs. Dorothy Tong, Miss Fumi Suzuki, Miss Alavana Chang, Mrs. Flora Ozaki, Miss Martha Rothwell, Miss Itsuko Tokumuro, Miss Hisako Yoshida, Miss Kiyoko Yafuso, Miss Kimuko Yamasaki, Miss Michiko Kikugawa, and Mrs. Elaine Johnson.

* * *

KAUAI NEWS NOTES

Samuel Mahelona Memorial Hospital

Miss Lillian Chong, a graduate of the Queen's Hospital School of Nursing, has returned from the mainland to become director of the occupational therapy department.

Miss Chong spent eighteen months at the Philadelphia School of Occupational Therapy studying medical theory, crafts and application. School affiliation included the University of Maryland for orthopedic and functional work; New Jersey State Hospital, Trenton, for the mentally ill; Montefiore County Sanatorium, Bedford Hills, New York, for tuberculosis patients. She remained on the staff of the New Jersey State Hospital for one year before returning to Hawaii.

Prior to her period of study on the mainland, Miss Chong was a member of the Mahelona Nursing Staff for three years.

Miss Rebecca Jane Tuttle, a graduate of Highland School of Nursing, Oakland, California, joined the nursing staff in September.

* * *

Miss Esther Igarashi, graduate of the Kuakini School of Nursing, was married to Mr. Masaichi Kono on November 29, 1948. Mr. Kono is also employed at Mahelona.

PEGGY ISHIMOTO

* * *

Mental Hygiene Society

Plans for a mental hygiene society on Kauai have been developed. Fifty enthusiastic members have already joined the organization, but at present officers have not been installed. Mrs. Margaret Hackfield of the Mental Hygiene Society spoke to various interested community groups on November 22, 23 and 24, which included Waimea PTA, Kapaa and Lihue teacher groups, and Kilauea PTA, and also spoke at a special luncheon held at Kauai Inn.

* * *

Personals

Miss Glynna Jones of Niles, Michigan, recently joined the public health nursing staff of Kauai, and has been assigned to the Kilauea District. She was previously associated with the health department of Dearborn, Michigan and the health department of the City of Los Angeles and also served as night supervisor at Seattle General Hospital.

* * *

Miss Gertrude Finnemore, previously public health nurse for Kilauea District, has completed special study at Shriner's Hospital in San Francisco and is now working at Kalaupapa Settlement, Molokai.

Miss Willa Shell, heroine of the 1946 tidal wave disaster in the Kilauea District, has written Miss Dorothy Teall about her work at Mineral Springs Sanatorium, Cannon Falls, Minnesota. She is in charge of records, x-ray reports and correspondence for eight counties and also confers with county nurses. Miss June Triplett, former Lihue public health nurse, is now working in one of these counties.

KIMIE TAMASHIRO

* * *

Excerpts from a newsy letter written by Rosie Kim Chang to Helen Gage will be of interest to a great many individuals in Honolulu and elsewhere in the Islands. Rosie was formerly a supervisor at Queen's Hospital and is now residing in Pittsburgh, Pennsylvania, where her husband is enrolled in dental college. She was president of the City and County of Honolulu Nurses' Association in 1946.

"Janice Mickey is now Director of Public Health Nursing in Pittsburgh! I read this in the *Pennsylvania Nurse,* September issue. She took over on September 15. Last week I called her and we had dinner together. It was wonderful to speak to someone from Honolulu . . . She misses the Honolulu nurses and the Islands.

"Vera Hansel and Louise Bailey are also here. Both are taking courses at the University. I have not seen them but will most likely, at the nurses' convention next week. . . . Harriet Link who worked at Queen's is also here.

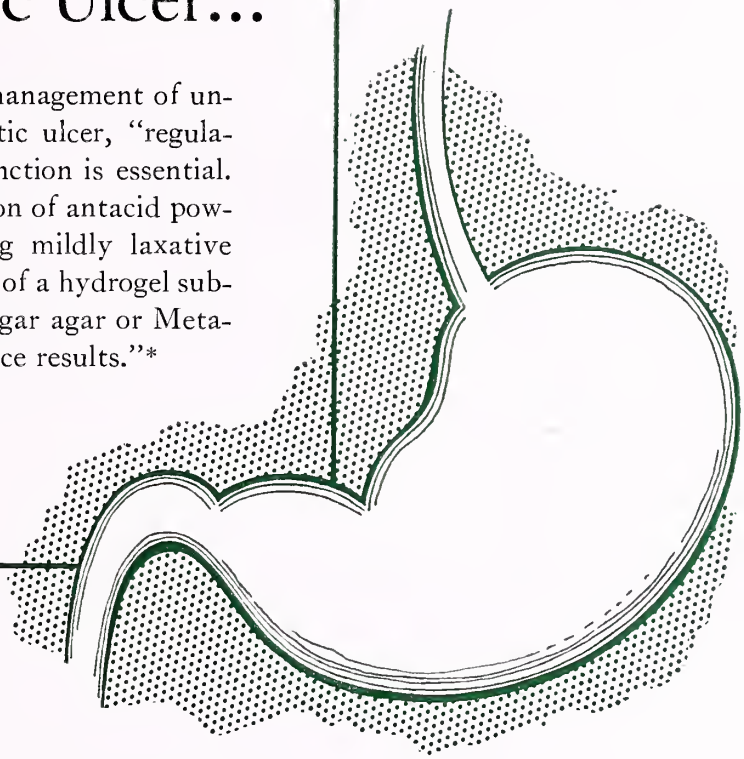
"Dr. Hornick's mother lives in Pittsburgh. Have not met her yet. His cousin says that Dr. H. is taking courses at Columbia U.—Psychiatry.

"Smoke control has done wonders here. The air is fresher and cleaner. There is still more work being done along these lines. Someday Pittsburgh will be known as the smokeless city . . .

"Heard from Jessie Kohr. She is now on the faculty at Pasadena City College and in sole charge of practical nurses. . . ."

Bowel Regulation in Peptic Ulcer...

In the medical management of uncomplicated peptic ulcer, "regulation of bowel function is essential. . . . A combination of antacid powders . . . having mildly laxative effects or the use of a hydrogel substance, such as agar agar or Metamucil, will produce results."*



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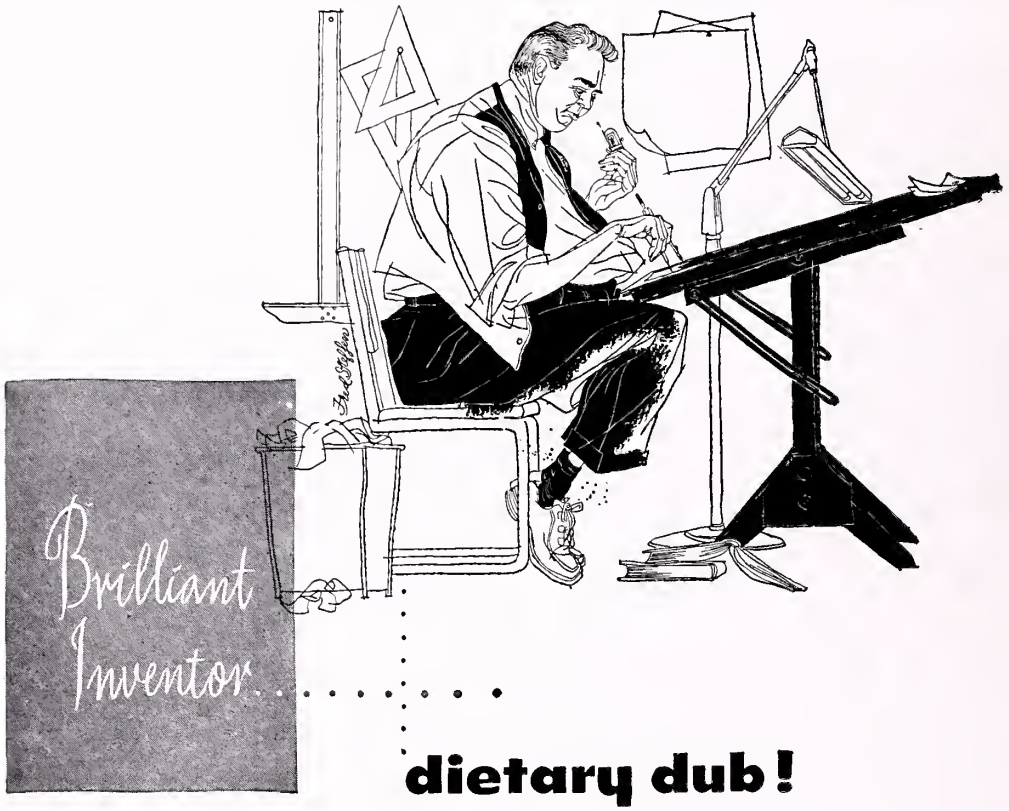
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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

*Gerendasy, J.: Modern Treatment of Peptic Ulcer, J. M. Soc. New Jersey *43*:84 (March) 1946.



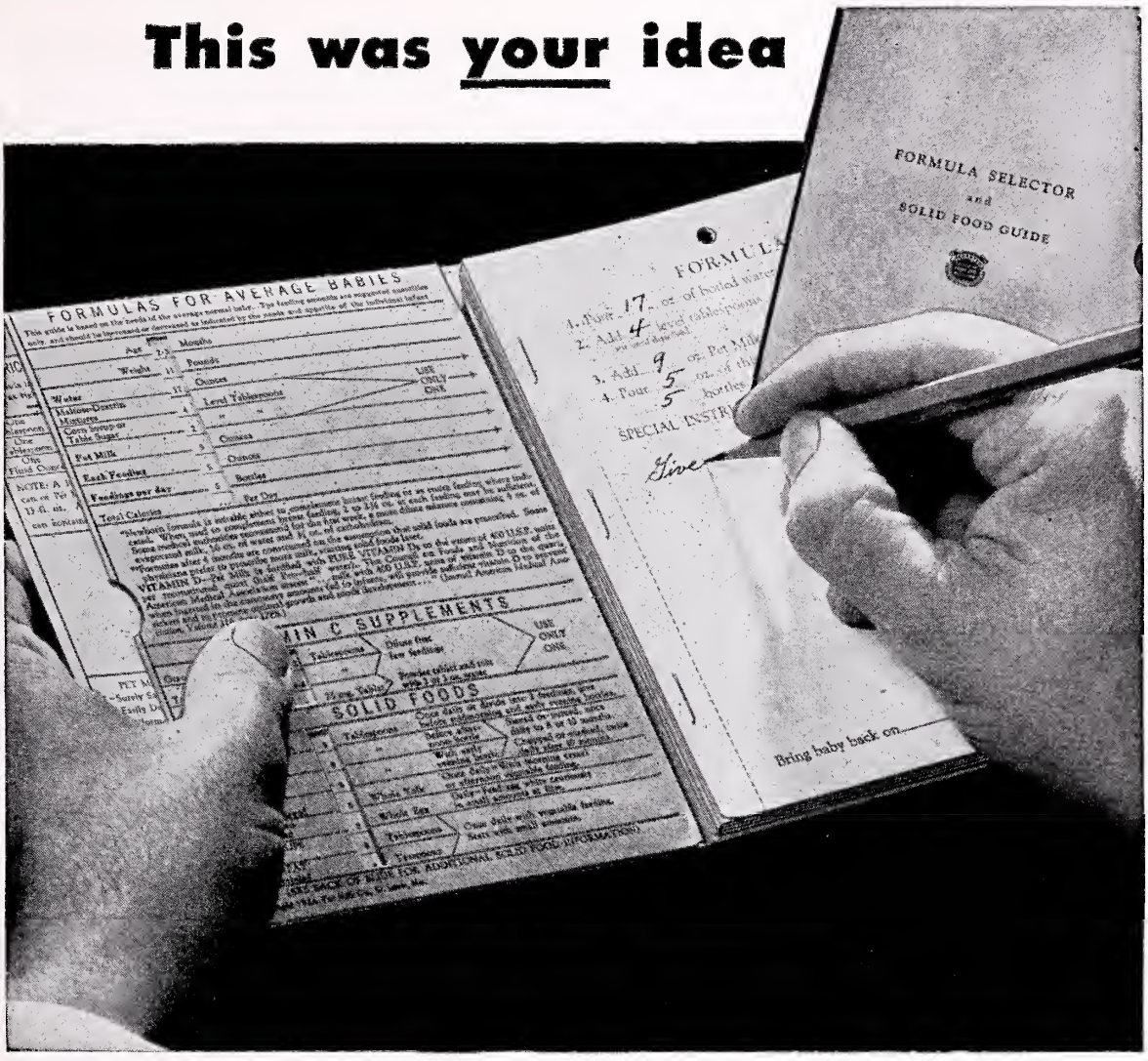
dietary dub!

Factories throb to the pound of his inventions—while he sits. Hour after silent hour he sits and schemes mechanical schemes or times the pace of tiny models. In his spare time? Moves to a rocking chair and reads. Has no appetite? Neither do hundreds of others whose occupations or pastimes require little physical energy. And you could cite many other reasons for inadequate diets—excessive smoking, indifference, ignorance, strong likes and dislikes . . . In many such cases, your prescription for one or more vitamins accompanies your advice on dietary reform. When you prescribe an Abbott product, you are assured that your patient will receive the full potencies intended. There is an Abbott vitamin product to fill every need—for one or a combination of vitamins, for supplementary or therapeutic levels of dosage, for oral or parenteral administration. Your pharmacy will be glad to fill your prescriptions.
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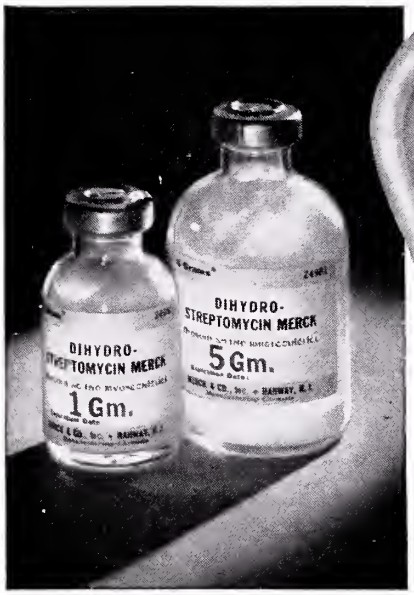
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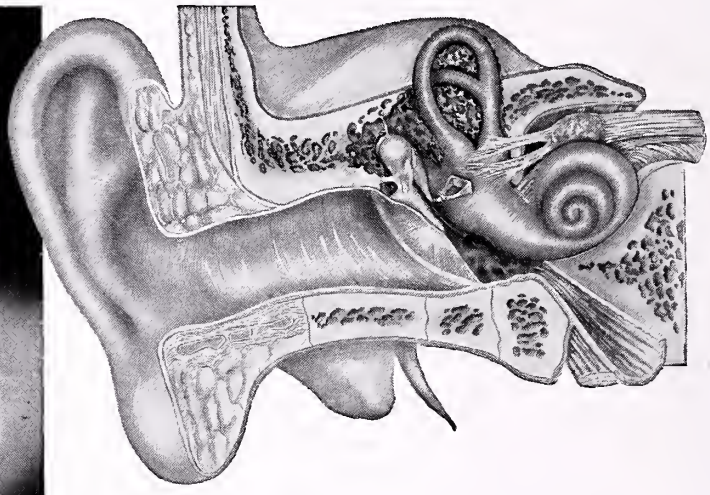


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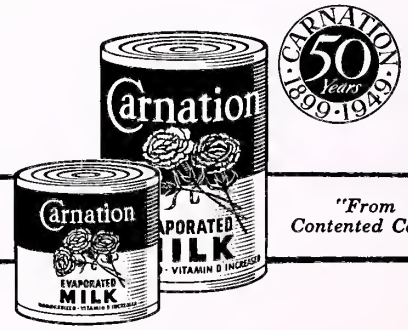
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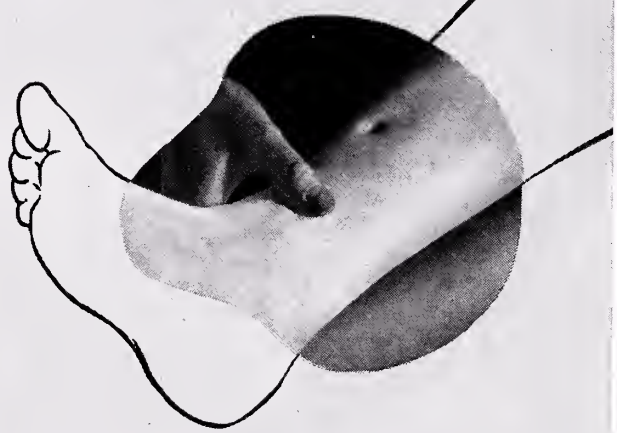
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*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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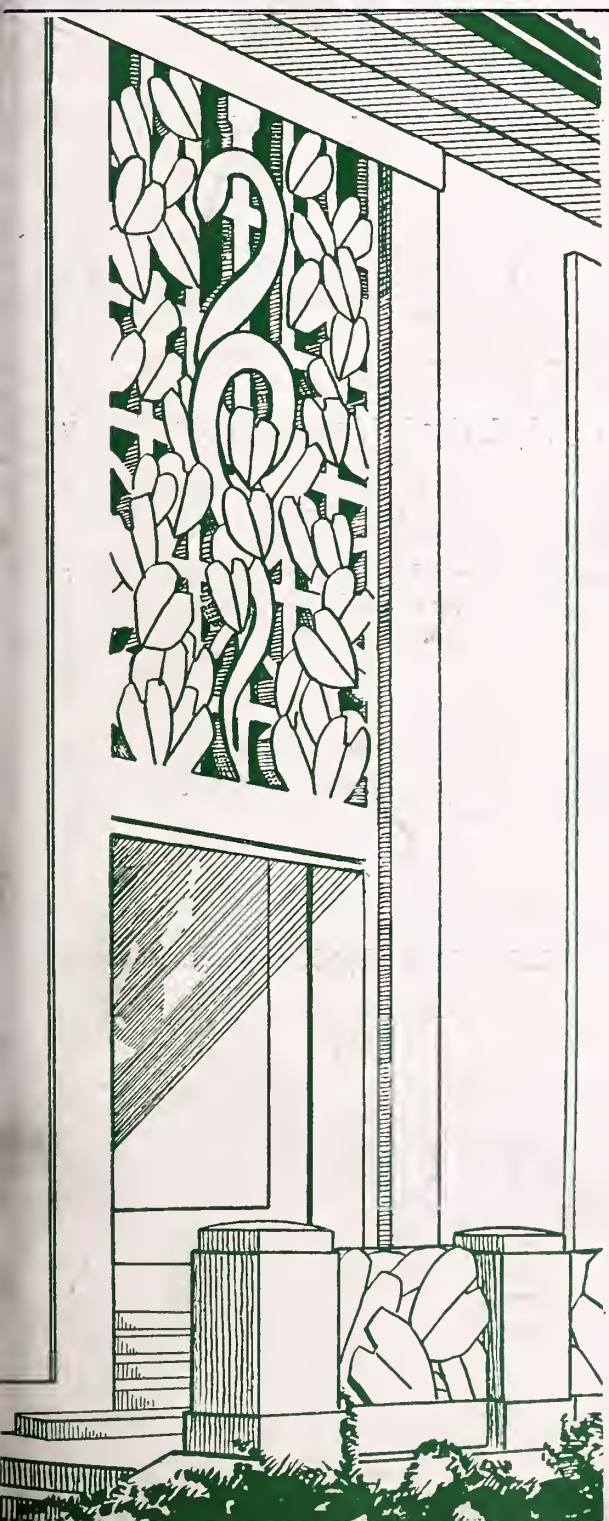
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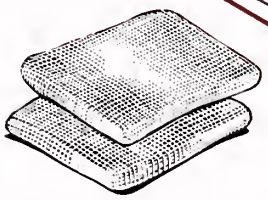
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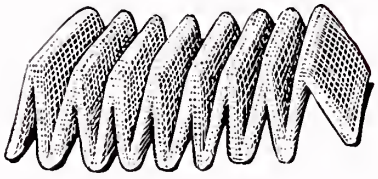
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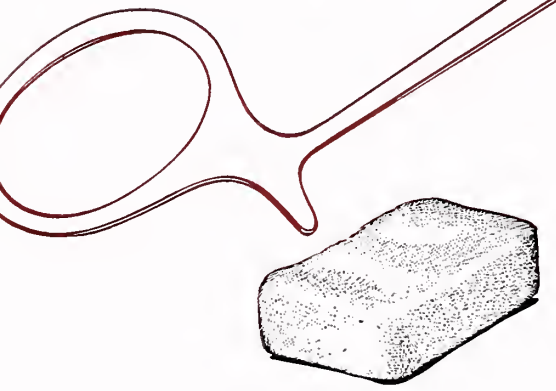
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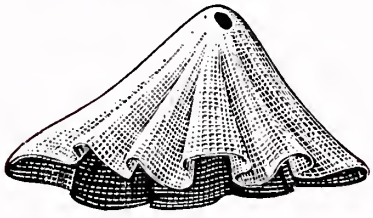
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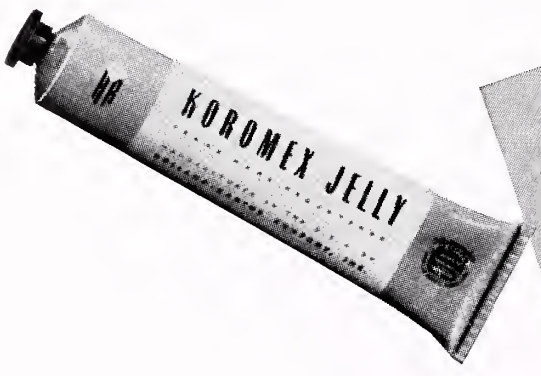


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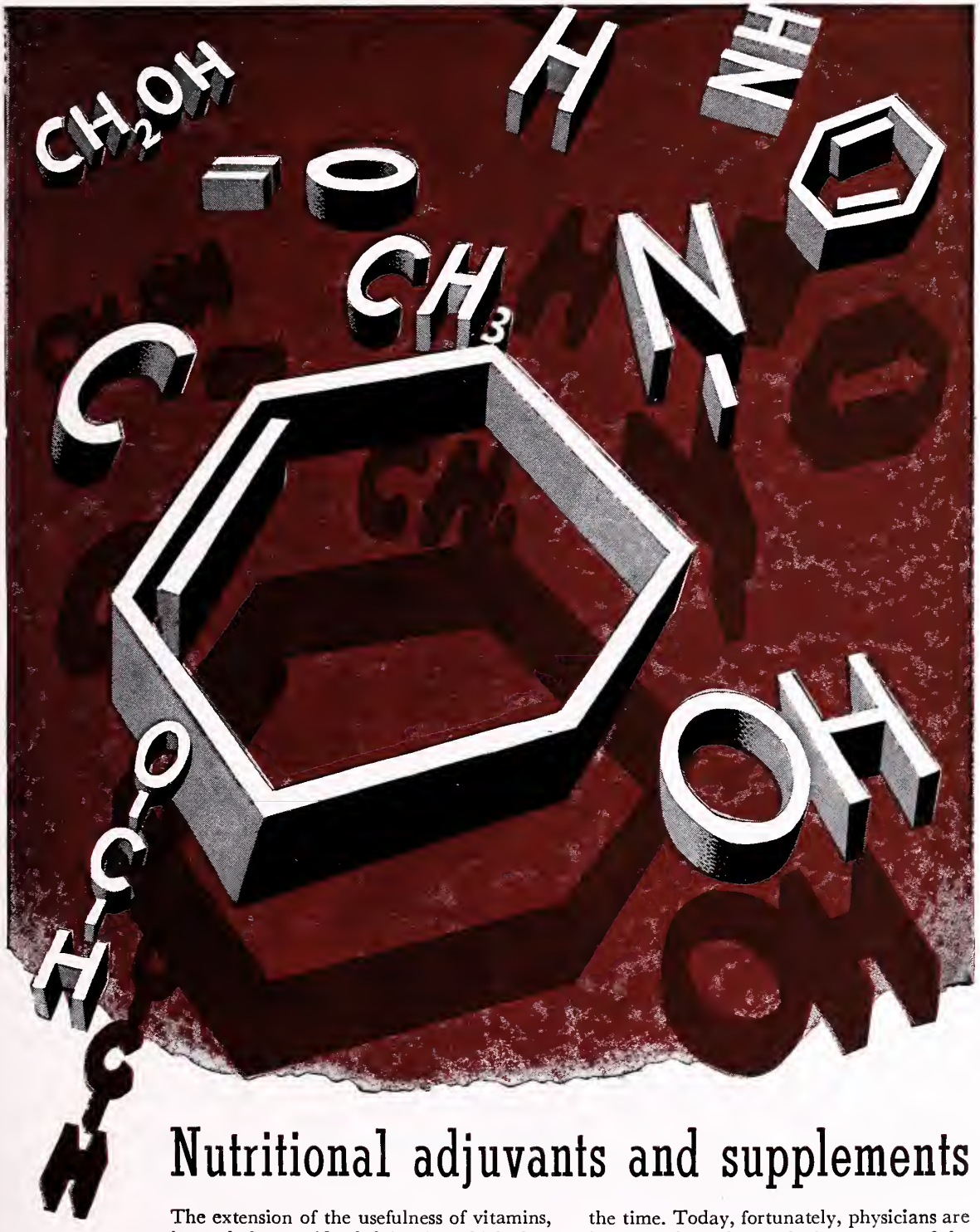
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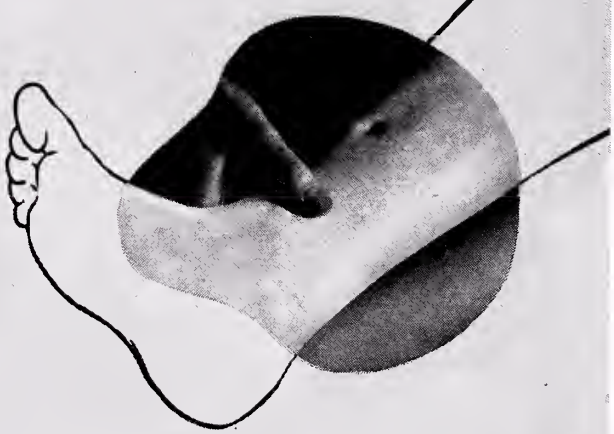
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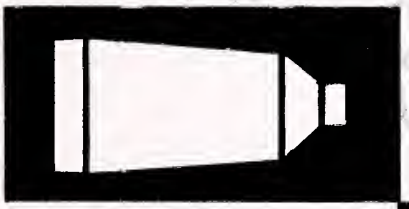
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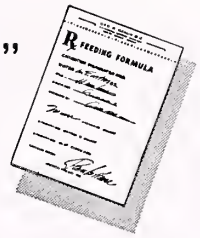
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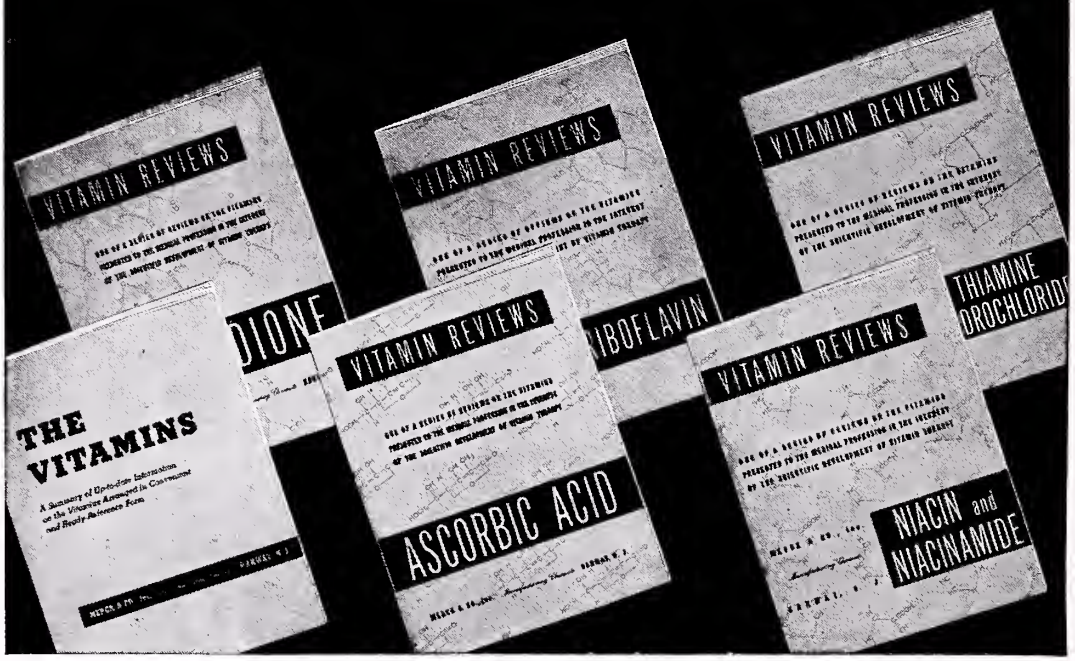


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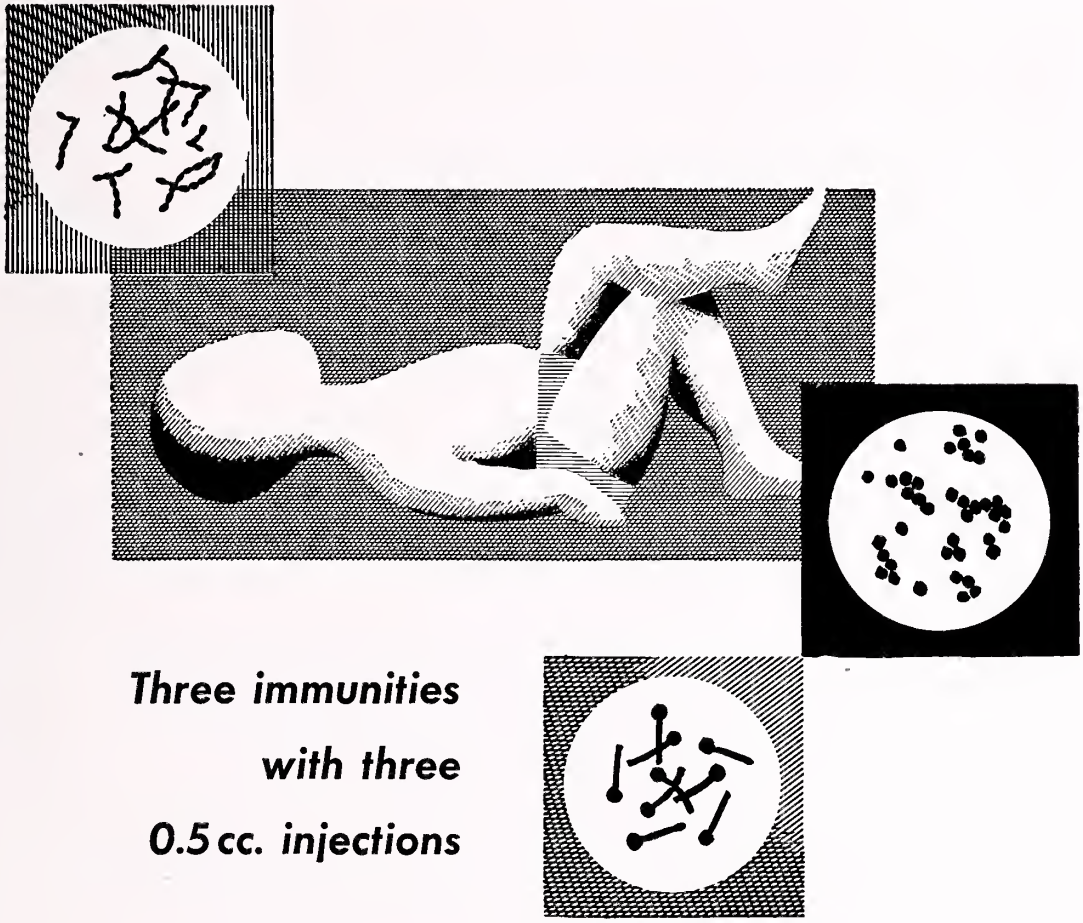
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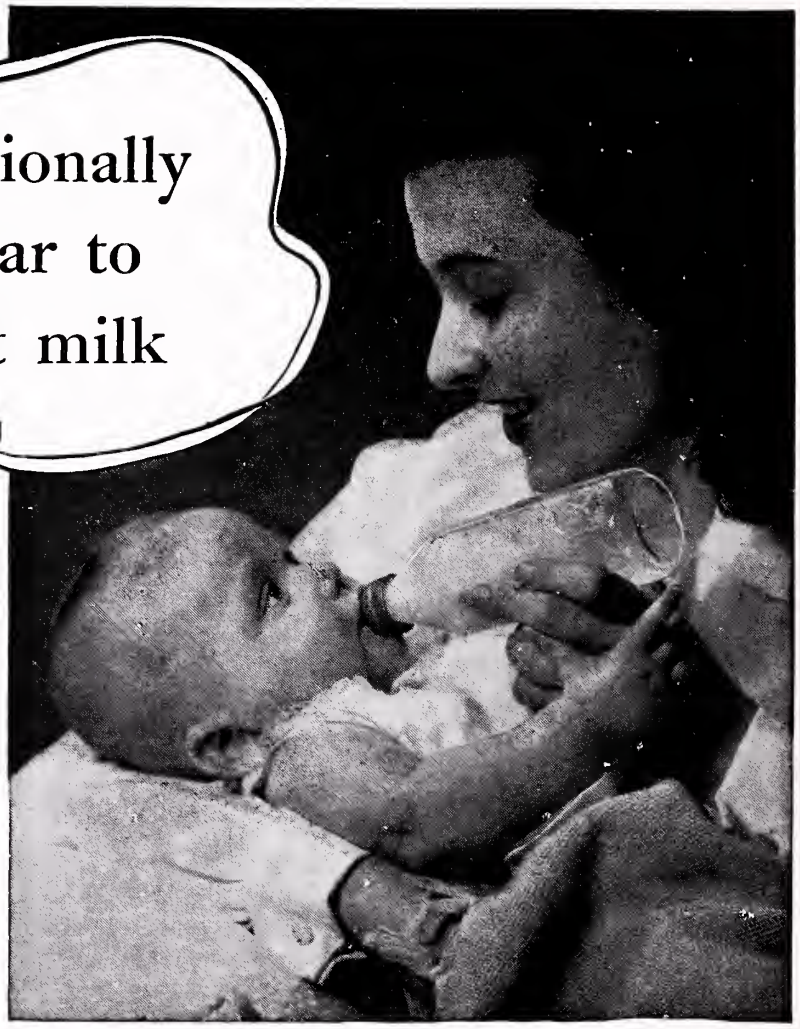
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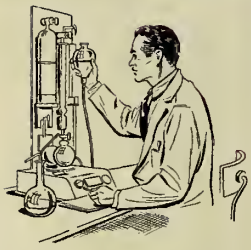
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Studies on Cultivation of the Leprosy Bacillus

KEIZO NAKAMURA, M.D.*
TOKYO, JAPAN

MY BASIC study on cultivation of leprosy bacillus was initiated in 1930.

The brief contents of the present studies are hereunder described in 4 chapters, namely Culture Medium, Temperature of Cultivation, Method of Cultivation (including Evaluation of Newly Devised Culture Media), and Results of Cultivation.

Culture Medium

The culture medium consists of *base medium* and *additional ingredients.*

Base Medium	*Per Cent*
mucin prepared from submaxillary gland of ox	0.4
soluble starch	0.2-0.4
glycerin (Price)	2.0
malachite green	0.001

These are dissolved in distilled water.

human or ox serum (inactivated) 5.0

This is added to the medium aseptically immediately before use.

Preparation of Culture Medium

(1) 1:100,000 malachite green solution is made with 2% sterile glycerin water.

(2) The above is added with 1/10 volume of 4% sterile ox submaxillary gland mucin, and then added with 1/10 volume of 2% sterile soluble starch solution, and then intermittently sterilized for 3 days at 85°C. for 15 minutes, each time.

Cautions for Preparation of Culture Medium

(1) To dissolve ingredients of medium, sterile distilled water is always used instead of saline.

(2) It is not recommended to make a large quantity of 4 per cent mucin solution at one time; 0.4 grams of mucin is ground with 5 cc. of distilled water in a mortar, dripping 1 per cent caustic soda solution drop by drop until the pH is adjusted at 7.3. A lower pH, less than 7.3, is preferable, a pH value exceeding 7.3 is not permissible. Then, distilled water is added to make up the whole volume to 10cc.; thus 4 per cent mucin solution is obtained.

(3) To dissolve soluble starch, 2 grams of soluble starch is added to 100cc. of distilled water and is shaken in a hot water bath in order to make a transparent solution, then autoclaved.

Among the above mentioned ingredients of the base media, mucin prepared from ox submaxillary gland is the most particular one. Selection of the material is most important for preparation of mucin.

A primary condition for obtaining mucin of good quality is to secure fresh submaxillary gland from a healthy ox, immediately after slaughter. The preparation of mucin thus obtained is then tested for its viscosity to decide whether this mucin is suitable for the purpose of cultivation or not. According to our experience up to the present time, a 4 per cent solution of the mucin should show 140-160 with Ostwald's viscosimeter No. 3 at 25°C. A mucin preparation of higher viscosity is even better, if any such preparation exists.

Additional Ingredients

The following were tried out and showed favorable results:

phthiocol	1γ per 1cc. culture media
Vitamin B_1	1γ-4γ per 1cc. culture media
Vitamin B_2	1γ-4γ per 1cc. culture media

Among these additional ingredients, phthiocol is the most remarkable one. Originally, this substance is presumed to be closely related with the oxidation-reduction enzyme contained in the bacterial body of tubercle bacilli, particular attention thus having been directed to the biological significance of this substance. I was prompted to use this substance considering that it might stand in a closely related position with the growth of acid fast bacteria other than tubercle bacilli.

On the other hand, vitamin B_1 was tried because it is believed that vitamin B_1 is indispensable for the growth of various fungi. Further, vitamin B_2 was tested since it is believed that it has relationship with "whole oxygen respiration" of lactic acid bacteria cultivated anaerobically.

These additional ingredients are added to the base medium 2-3 days after it has been inoculated with the inoculum.

The final pH of the culture medium is from 6.6 to 6.8.

Temperature of Cultivation

As regards temperature of cultivation: instead of incubation for a long period of time at a constant temperature, repeated thermal stimuli were given at suitable intervals. In other words, it was incubated at 37°C. for 3 days and then at 25°C. for the following 3 days, and so on repeatedly.

Method of Cultivation

With reference to the numerous culture media so far devised for the cultivation of leprosy bacilli, the author's opinion is that adequate attention was not directed to verify whether the organisms had actually multiplied in the culture media or not. In case cultivation of the organisms was attempted with an initial inoculum containing abundant organisms, and subsequent subcultures were made with a portion of the initial culture which already contained abundant organisms right from the beginning, the claim made of a successful subculture merely means a successful detection of organisms up to such and such a dilution. *Such were the majority of the successful cases in the past.* Furthermore, the initial inoculum is usually emulsified leprous nodule, and it is quite difficult to get a completely homogeneous emulsion, so that such emulsion usually contains a fair amount of fine tissue fragments. These fragments are dissolved in the culture medium as time passes on, and liberate leprosy bacilli or conglomerations of bacilli into the culture medium. Not infrequently, these conglomerations of bacilli have been mistaken for organisms which had multiplied in the medium.

For this reason, I have been consistently of the opinion that it is essential to initiate the cultivation with an initial inoculum containing a bare minimum amount of organisms, and to get defi-

* Chief of Divisions of Seiology and Leprosy, National Institute of Health.

nite evidence of multiplication for the evaluation of newly devised culture media. If such crucial evaluation had been made on the culture media reported heretofore, there would have been no more questions to be solved. One may doubt the necessity of such crucial evaluation, however, once a medium has withstood this evaluation; the problem will then be solved once and for all, because the actual multiplication of the organisms will be then accepted by anybody.

In the present experiment, pathologic specimens collected from human and rat leprosy were emulsified 1:20 with sterile physiologic saline and aseptically filtered through 2 layers of gauze. The filtrate, then, was centrifuged, and the sediment was treated with 5 per cent sulfuric acid, then washed with sterile physiologic saline 3 times. The final sediment was then resuspended in sterile physiologic saline of the original volume, and once again centrifuged at 2,500 r.p.m. (or sometimes for 10 minutes at 3,000 r.p.m.). Three-tenths cc. of the resultant supernatant fluid is then added to 6cc. of culture media. On the other hand, a stained film is prepared from 0.05cc. of the same supernatant fluid for counting of organisms over more than 100 microscopic fields. According to the results of this counting and observation of film, all the organisms found in the field are isolated and the average number of organisms found is only 1-3 per field. In some instances, the number was even fewer, so that, although we were confident of the supremacy of our culture medium, we had to doubt the success of our attempt with such bare minimal number of organisms as the initial inoculum. Nevertheless, we decided to adopt this method because we thought that there was no other way to prove the multiplication, in the initial culture at least.

Results of Cultivation

During the course of growth of organisms after inoculation, a fair amount of precipitate is formed, but this precipitate decreases toward the end of incubation.

In order to observe the pattern of multiplication of organisms, stained films were prepared for microscopic examination from one drop of the culture after it was gently shaken at regular intervals.

More than 4 weeks was necessary to observe a definite picture of multiplication of organisms. Since the number of organisms in the initial inoculum is very scanty, thirty to forty days was necessary, especially for the initial culture. Subcultures were usually made at six to eight weeks' intervals. Subcultures were made with one drop from a gently shaken up culture as the inoculum. The organisms grow very well in this medium, and the growth of rat leprosy bacillus is especially good, so that conglomerations of organisms in a stained film are visible with a magnifying lens or even with the naked eye. Similar findings were occasionally met in the case of human leprosy bacillus.

The organisms grown on this culture medium are morphologically typical leprosy bacilli, and no marked involution forms have been found during the course of incubation as yet.

The average resistance against boiling is 30-40 seconds in both human and rat leprosy bacillus, within 1 minute in any case.

Infection test with the rat leprosy bacilli (Kumamoto strain) obtained from the culture on white rats was successful at the first generation.

Cultures of human and rat leprosy bacilli thus obtained were treated with antiformin to remove components of the culture medium and suspended in phenol saline. The bacterial suspensions thus obtained are tested by being used as the antigen for "Mitsuda's reaction" for comparison with known leprosy bacilli. The cultivated human leprosy bacilli showed parallel results with "Mitsuda's reaction," showing negative results in the cases of lepromatous leprosy without exception. Contrary to this, the rat leprosy bacilli showed positive results in some lepromatous cases and in some other cases which were negative with "Mitsuda's reaction" using human leprosy bacilli.

This newly devised culture medium was tested with 10 cases in total, 3 strains of rat leprosy bacillus and 7 strains of human leprosy bacillus. With all 10 cases, this culture medium succeeded in cultivating the leprosy bacillus. The seventh or eighth subculture was successful with rat type organisms, and fourth or fifth subculture with the human type.

Further, it might be necessary to add that the initial inoculum was cultivated on culture media for tubercle bacillus, glycerin agar media and ordinary agar media and observed to confirm that these media remained sterile for a long period of time.

On every occasion of subculture, or even during the period of incubation, similar observations were made as often as possible. Similar observations were made with fluid media such as glucose broth and the same results observed.

Summary

In view of the evidence described above, it seems to be well founded to claim that this culture method for leprosy bacilli is a reliable one for the purpose.

Maternal Mortality in Hawaii

JANET M. BOOG, M.D.
HONOLULU

MATERNAL mortality figures in relatively small and isolated population areas such as the Territory of Hawaii are often difficult to collect in a large enough quantity to be statistically significant. In order to increase the number of available figures, it is necessary to compare and analyze material over a long time period. A ten- or twenty-year analysis would be ideal if the data available were the result of accurate, uniform record keeping. The Bureau of Health Statistics records and classifies deaths according to the *Manual of International List of the Causes of Death,* many sections of which, including "Diseases of Pregnancy, Childbirth and the Puerperium," were revised in 1939.[1] The type of revision is exemplified in the use of the word "puerperium" in diagnoses for maternal mortality. Before 1939, "puerperium" applied to both antepartum and postpartum periods. In the revised application, it refers only to the postpartum. Because of this and other changes that interfere with the accurate analysis of statistics, our material will cover only the past five to seven years in most instances. The five-year interval is used whenever comparisons are made with the mainland, since composite and corrected statistics for the mainland are available to 1945 only.

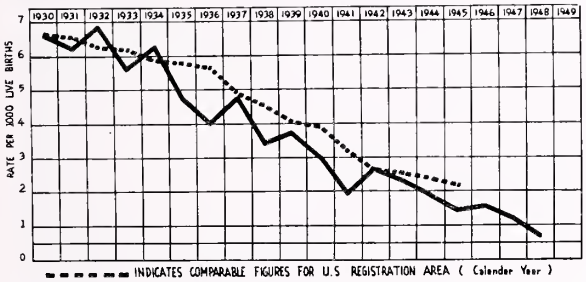


Fig. 1—Territory of Hawaii. Number of maternal deaths per 1,000 livebirths, 1930-1948[2]

With respect to the comparison of small population rates such as those for the Territory with the mainland, it is well to state that such comparisons are not conclusive. The figures and graphs presented are not final but are indicative of a trend.

Data and Discussion

Figure 1 shows the similarity of the downward trend for mortality rates on the mainland and in the Territory. The irregularity of the gradient shown for Hawaii is due to the small number of deaths, since the fewer the total deaths the greater the effect of a single death upon the rate. In 1945, the rate for the mainland was 2.0, and for Hawaii 1.2.

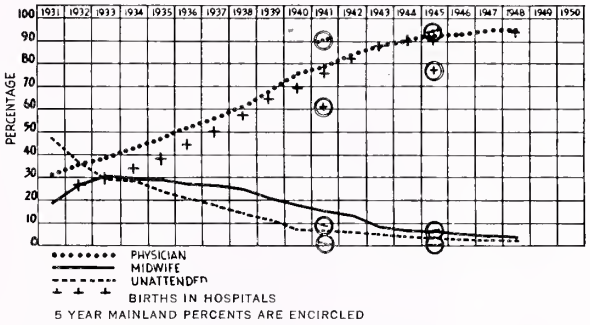


Fig. 2—Percent of births delivery by physicians, midwives and unattended. Territory of Hawaii, 1931-1948[2]

Figure 2 demonstrates that in the Territory, hospital and physician deliveries show a steady increase, midwife and unattended deliveries, a decline. The greatest difference in this respect between the mainland and the Territory is shown to be the number of patients delivered in hospitals. In 1945, 77 per cent of all maternity patients on the mainland had hospital deliveries, while in the Territory, 90 per cent were hospitalized.

Figure 3 shows the maternal mortality rate per 1,000 live births for each state, the District of Columbia, and the Territory of Hawaii for the five-year period 1941-45. The rates are placed in their ranking order to demonstrate the relative position of Hawaii, which had a rank of twenty-one. Hawaii was in the upper third, comparing well with the states that have large progressive medical centers. In comparison with states of similar climatic conditions, it is seen that all but one of the southeastern and southwestern states had higher rates than the Territory.

Formerly Consultant Physician in Maternal Health, Bureau of Maternal and Child Health, Department of Health, Territory of Hawaii.

Read before the Honolulu Obstetrical and Gynecological Society, June 21, 1948.

[1] *Manual of the International List of Causes of Death, 5th Edition. Joint Causes of Death,* 4th Edition (1939). Section XI, "Diseases of Pregnancy, Childbirth and the Puerperal State." (U. S. Government Printing Office, Washington, D. C., 1940.)

[2] Source of Data—Number of Deaths: U. S. Vital Statistics Special Reports; National Summaries; Vol. 25, No. 5 (6/7/46) *Deaths and Death Rates for Each Cause, United States, 1941-1944* Vol. 27, No 7 (9/11/47) *Maternal Mortality by Cause and by Race, United States and Each State, 1945.* T. H. Bureau of Health Statistics Records.

The first three graphs show Hawaii in a favorable position, in comparison with the mainland, in its low maternal mortality rate and the number of physician and hospital deliveries. In 1945, the Territory had 13 per cent more hospital deliveries than the mainland.

The ranking position of Hawaii for maternal mortality as compared with the individual states places it well above states of a similar climate, indicating that mild climatic conditions, though salubrious, have little effect on maternal mortality

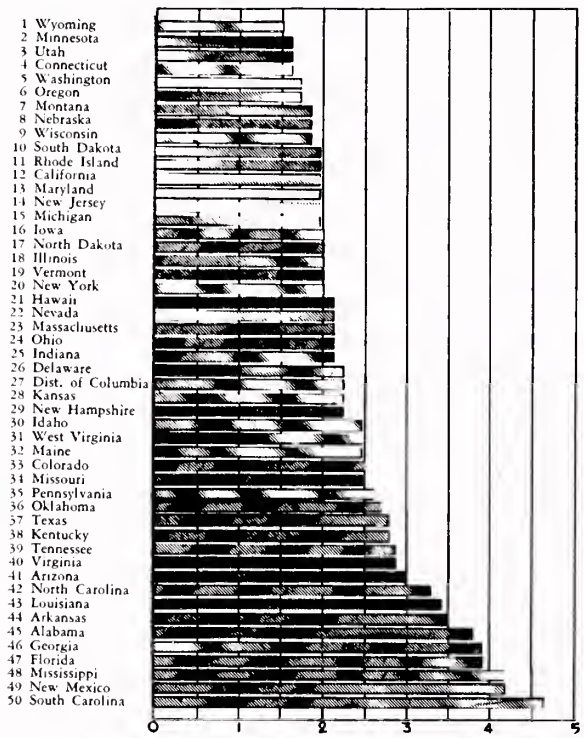


Fig. 3—Maternal mortality. Rank order of Hawaii and each state for five-year period, 1941-1945[2]. Rate per 1,000 livebirths.

rates. Also, as shown by the mainland rates, a warm, healthful climate does not counterbalance other factors involved in obtaining a higher mortality, such as little or poor prenatal care, unattended deliveries, low economic situations, and bad dietary conditions. Many of these factors are found in southern states.[3,4]

Part of the material in Table 1 is shown on the previous line graphs. Column 2 shows the gradually decreasing maternal mortality rate in the Territory, column 3, the actual number of deaths, and column 4, that most of the deaths occur in hospitals. This is to be expected since the percentage of births in hospitals ranged from 82.4 in 1942 to 94.1 in 1947.

Because of the larger population not only of Honolulu itself but also of the surrounding areas which use Honolulu hospitals, the greatest number (not the highest rate) of maternal deaths in the Territory occurs in Honolulu. This fact points to the necessity for emphasis being given to provision of more adequate facilities for maternal care in this center of population. On Hawaii, in contradistinction to Oahu, most of the maternal deaths occur in rural sections. The well-populated Kona area, for example, because it is over 100 miles from Hilo is less likely to send patients to Hilo for delivery, indicating that on the other islands, the emphasis should be given to providing improved maternal care and facilities in the rural hospitals.

TABLE I—*Maternal mortality in the Territory of Hawaii*[2]

YEAR	RATE	NUMBER OF DEATHS	NUMBER OF DEATHS IN HOSPITALS	NUMBER OF DEATHS ON OAHU		NUMBER OF DEATHS IN HAWAII		PER CENT BIRTH IN HOSPITALS
				Hon.	Rural	Hilo	Rural	
1948	0.7	10	9	5	0	2	0	95.0
1947	1.2	17	16	7	4	1	3	94.3
1946	1.5	18	18	11	1	0	3	92.6
1945	1.6	20	18	14	1	2	1	91.2
1944	2.0	24	23	12	3	4	1	90.1
1943	2.3	25	20	11	6	2	4	87.63
1942	2.6	27	25	14	2	0	6	82.4
1941	2.0	19	19	4	2	1	6	77

In Figure 4, it is shown that for the years 1941-45, hemorrhage and accidents associated with hemorrhage were the greatest cause of maternal death in the Territory with a rate of 0.7 as compared to the mainland's 0.4. The lower portion of the bar demonstrates that 95 per cent of the deaths occur during childbirth and the puerperium, and the upper portion that 5 per cent occurred during pregnancy or the antepartum period. The term hemorrhage includes the following diagnoses taken from the *Manual of the International List of the Causes of Death*: [1]

Hemorrhage of pregnancy (death before delivery)
- a. Placenta praevia
- b. Premature separation of the placenta
- c. Other and unspecified hemorrhage of pregnancy

Hemorrhage of childbirth and the puerperium
- a. Placenta praevia (with childbirth)
- b. Premature separation of the placenta (with childbirth)
- c. Other and unspecified hemorrhages of childbirth and the puerperium
- [d. Laceration, rupture or other trauma of the pelvic organs and tissue]

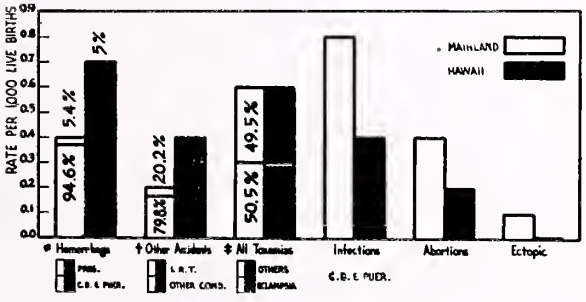
[3] *Charts on Births, Infant and Childhood Mortality—Maternal Mortality.* Federal Security Agency, Social Security Administration, U. S. Children's Bureau (1945).

[4] *The Toxemias of Pregnancy,* Chapt. I and II, William J. Dieckman. C. V Mosby Company (1941).

"Laceration, rupture or other trauma of the pelvic organs and tissue" is usually considered part of a separate classification, but it is rare for any of these deaths to occur without associated hemorrhage, so we have included them under hemorrhage of childbirth and the puerperium. Another reason for this inclusion is to place together all the conditions and accidents causing death frequently due to the lack of immediate and sufficient blood transfusions.

The second bar couplet demonstrates "other accidents and specified conditions of childbirth" with Hawaii having double the mainland rate. As was stated above, "laceration, rupture or trauma of the pelvic organs and tissue" has been included under "other accidents and specified conditions of childbirth" and under "hemorrhage."

The third bar couplet indicates the deaths from "toxemias" and shows an amazing similarity between the mainland and Hawaii both in the total rate, which is 0.6, and in the proportions of eclamptic deaths. Toxemias are the second leading cause of maternal mortality in the Territory, one-half of all maternal deaths being due to eclampsia.[4]



* *Hemorrhage*—C.B. and Puer.—Childbirth and the Puerperium (gestation 28 weeks or over) Preg.—Pregnancy (death before delivery).

† *Other Accidents*—Other accidents and specified conditions of childbirth (gestation 28 weeks or over). L.R.T.—"Lacerations, rupture or other trauma of pelvic organs and tissues" (gestation 28 weeks or over). Other Cond.—Other specified conditions of childbirth.

†† *All Toxemias*—Eclampsia—all eclampsia. Others—(1) Albuminuria and nephritis of pregnancy. (2) Acute yellow atrophy of liver.

Fig. 4—Comparison of principal causes of maternal deaths. United States and Territory of Hawaii, 1941-1945 [2]

Toxemias include: [1]

Toxemias of pregnancy (death before delivery)
- a. Eclampsia
- b. Albuminuria and nephritis of pregnancy
- c. Acute yellow atrophy of the liver
- d. Others (such as hyperemesis gravidarum)

Puerperial toxemias (excluding death before delivery)
- a. Eclampsia
- b. Albuminuria and nephritis of pregnancy
- c. Acute yellow atrophy of the liver
- d. Others (such as hyperemesis gravidarum)

[Abortion with mention of toxemia]

"Abortion with mention of toxemia" has been included under "toxemias" because if, for example, a maternal death occurred in association with convulsions and coma and abortion, the patient must certainly have died of eclampsia. The *Manual of the International List for the Causes of Death and Joint Causes of Death* classifies this case as an abortion. In this study such deaths have been placed under "toxemias" in order to have a more complete list.

"Infection during childbirth and the puerperium" is demonstrated by the fourth group of bars in Figure 4. Hawaii with a rate of 0.4 has one-half the mainland rate.

The fifth bar group shows the proportionate death rate due to abortions. The rate in Hawaii is 0.2, again one-half of the mainland rate of 0.4.

Since there were only two deaths in the Territory from ectopic pregnancies, no rate was obtained.

"Hemorrhage" and "accidents associated with hemorrhage" are the leading cause for maternal mortality in the Territory while "infections of childbirth and puerperium" is the leading cause for the mainland. Deaths due to "toxemias" fall into second place for both the Territory and the mainland.

It might be concluded that increased hospitalization for delivery in Hawaii has a positive effect in controlling deaths from infection, yet the same effect is not noticeable when applied to deaths from hemorrhage. This is significant since 95 per cent occurred during childbirth and the puerperium, presupposing that most of the patients in this category were hospitalized before the hemorrhage began or before it was acute. "Laceration, rupture or other trauma to the pelvic organs and tissues" comprise one-third of the childbirth and puerperal hemorrhage deaths in the Territory.

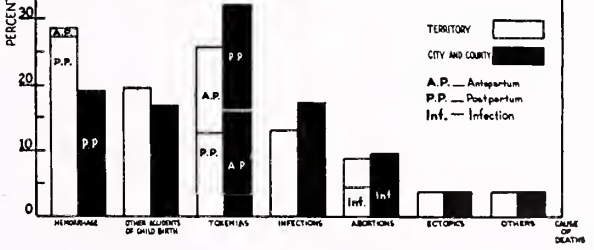


Fig. 5—Principal causes of maternal deaths by percentages of the total maternal mortality in the Territory; compared with City and County of Honolulu percentages, 1941-1947 [2]

Figure 5 presents a seven-year comparison of percentages for the causes of maternal deaths in the Territory and Honolulu. For Honolulu, the percentages are based on deaths "by place of oc-

currence"; that is, if a patient lived in Kaneohe but was brought to Honolulu to be delivered and then died, the death would be recorded for Honolulu. "Hemorrhage" and "toxemias" have been graphed as they were listed by the Bureau of Health Statistics without the diagnosis of "Laceration, rupture or other trauma to pelvic organs and tissues" being added to hemorrhages, and without "abortions associated with toxemias" being included under "toxemias." These omissions do not change gross comparisons.

In Honolulu, deaths due to toxemias are the greatest cause of maternal mortality with hemorrhage ranking second and occurring only during childbirth and the puerperium. For the Territory, hemorrhage is the greatest cause of death and toxemia the second.[4]

Figure 5 also demonstrates an approximately equal distribution of toxemias between the antepartum and postpartum period.

"Abortions associated with infection" comprise over one-half the abortion deaths. The total percentage is approximately the same for the Territory and Honolulu.

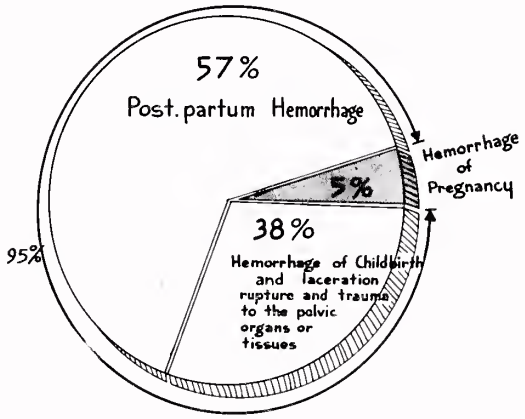


Fig. 6—Hemorrhage as a cause of maternal mortality in the Territory of Hawaii, 1941-1945[5]

Figure 6, a breakdown of the second bar on Figure 4, shows that a very small part of the hemorrhage deaths, 5 per cent, occurred during the antepartum period; 95 per cent occurred during childbirth and the puerperium; 57 per cent were caused by what is ordinarily diagnosed as postpartum hemorrhage and due to (1) atony of the uterus, (2) placenta accreta, (3) adherent placenta, (4) retained secundines, placenta, or membranes. The other 38 per cent were due to (1) placenta praevia, (2) premature separation of the placenta, (3) other hemorrhages of childbirth, and (4) "laceration, rupture or other trauma to the pelvic organs and tissues."

[5] T. H. Health Statistics Records.

With hemorrhage as one of the principal causes of maternal mortality, it is interesting that most of the deaths occurred within the childbirth and postpartum period when the patient was in the hospital and under supervision. It would appear that less operative interference, adequate laboratory coverage, and sufficient and immediate transfusions would reduce the number of these fatalities.

Table 2 shows the average maternal death rate for a seven-year period by race for two of the principal causes of maternal mortality.

TABLE II—*Territory of Hawaii maternal mortality. Racial. Average for 1941-1947*[5]

	Hemorrhage		Toxemia	
RACE	NUMBER	RATE	NUMBER	RATE
ALL RACES	51	0.6	41	0.5
HAWAIIAN	7	4.2	8	4.7
PART HAWAIIAN	5	0.2	6	0.3
PUERTO RICAN	5	2.5	--	--
CAUCASIAN	5	0.4	4	0.3
CHINESE	4	0.8	2	0.4
JAPANESE	19	0.7	16	0.6
KOREAN	--	--	--	--
FILIPINO	6	0.7	5	0.6

Because the number of cases is small, it indicates merely a trend and then only when one rate is out of proportion to the others. The Hawaiians do show a significantly higher fatality with a rate of 4.2 and 4.7 for hemorrhage and toxemia, respectively. This is two to 20 times higher than the rate shown for any of the other races. The same type of elevated rate is present for obstetrical deaths due to sepsis and for many other non-obstetrical affectations.

Once the Hawaiians contract a disease or are involved in an accident, their fatality rate seems to be higher. Poor dietary habits and lack of early prenatal care are suggested predisposing causes.

TABLE III—*Maternal deaths and rates for abortions. Territory of Hawaii and City of Honolulu, 1936-1940 and 1941-1945 (5-year totals and 5-year average rates)* [5]

TERRITORY OF HAWAII				CITY OF HONOLULU			
RATE PER 1,000 LIVEBIRTHS		Number of Deaths		RATE PER 1,000 LIVEBIRTHS		Number of Deaths	
1936-40	1941-45	1936-40	1941-45	1936-40	1941-45	1936-40	1941-45
0.6	0.2	26	11	0.6	0.2	12	6

Table 3 indicates a decided decrease for abortion deaths in both the Territory and Honolulu when two consecutive five-year average periods are compared. For the 1936-40 period, the number of deaths for the Territory was 26 and the rate 0.6. The same rate applied to Honolulu.

For the 1941-45 period, the Territorial rate was 0.2 and the number of deaths, 11. There was the same consecutive and proportionate reduction in Honolulu. The mainland average rate for 1941-45 was 0.4.

The abortion death rate in the Territory and Honolulu has been decreased by two-thirds within 10 years. This may be due to less frequent illegal abortion, the use of chemotherapeutic and antibiotic agents for infection, a relatively greater availability of blood for necessary transfusions, and the more conservative treatment of threatened abortions.

Discussion and Recommendations

The maternal mortality rate in the Territory of Hawaii is low, but since most mainland studies indicate that maternal deaths are largely preventable, every effort should be made to reduce them to an absolute minimum.

Specific Methods of Attack

First, since "hemorrhage" and "accidents associated with hemorrhage of childbirth and the puerperium" are the greatest cause of death, the attack should begin here. Most deaths occur during the intra partum and postpartum periods, so the patients are usually hospitalized before there is a massive or acute blood loss. With approximately 95 per cent of all deliveries being performed in hospitals, they should have the following facilities as an integral part of their maternity setup: (1) an available blood bank containing at least two units of low titer type O blood, one unit being Rh negative, each unit to be replaced immediately upon use; (2) a technician (or other personnel capable of doing blood typing and cross-matching) available at all times; (3) an adequate staff available to give transfusions immediately, in sufficient quantity, and under adverse circumstances.

A little less than one third of deaths due to, or associated with "hemorrhage of childbirth and the puerperium" are caused by "laceration, rupture or other trauma to the pelvic organs and tissues." These deaths occur in hospitals, but the attending physician is usually directly responsible. They are frequently caused by ill-advised vaginal interference with labor and could be prevented by: (1) better prenatal care including careful internal pelvimetries, and x-ray pelvimetry (not a flat plate of the abdomen) where there is need for laboratory confirmation; (2) having obstetrically skilled physicians act as consultants on city hospital staffs, and be willing to go to outer islands upon request; (3) having facilities available for immediate inspection, repair or operation, and transfusion after laceration or rupture has occurred.

The next point of attack should be the toxemias, since they are the second ranking cause of maternal deaths, with eclampsia comprising approximately one-half. Prevention depends on: (1) early prenatal care during which patients are taught the value of such care and are encouraged to seek medical advice early in pregnancy from either a physician or clinic; (2) physician recognition of the prodromal symptoms and signs of toxemias with the diagnosis of the type of toxemia being made as early as possible so that proper physiological management for that type can be instituted; (3) special attention being given to patients during the puerperium when they have had a previously diagnosed toxemia. Fifty per cent of the toxemia deaths occur after delivery.

General Methods of Attack

First, consideration should be given to three phases of education. (1) The public should be informed of the need for early antepartum and postpartum care through advice from physicians, by means of properly distributed literature, and by radio programs. Community interest must be stimulated to the extent of encouraging private organizations and groups to help make transfusion blood and donor lists available to those rural areas and hospitals that find difficulty in getting blood. Rh typing material should also be made available. The Honolulu Blood Bank has been an outstanding single factor in servicing both local and outlying districts and islands, but there is still a great need for quickly available blood in rural areas. (2) Sufficient prenatal clinics and father and mother classes should continue to be maintained at various strategic points throughout the Islands. In Honolulu, such clinics are associated with the hospitals and cooperate with the Department of Health in giving services. In the rural areas, they are maintained by the Department of Health in cooperation with the plantation physicians. (3) Physician education is needed. This may be accomplished by bringing outstanding obstetricians to the Islands for postgraduate courses, by making use of visiting obstetricians as speakers for local medical societies, and by supporting an active Obstetrical and Gynecological Society which will help raise the standards of obstetrics in the community by means of discussion and constructive criticism of deleterious obstetrical practices.

Second, there is the necessity of improving hospital standards. It should be required that all hospitals that house maternity patients meet the minimum standards of the American College of Surgeons and the standards for maternity hospitals and homes as set forth in the regulations of the local Department of Health. The construction, facilities, and personnel must be maintained from year to year, and every means should be put into effect so as not to allow deterioration.

Third, an analysis should be made of maternal deaths. There is necessity for a uniform and consistent index to maternal deaths so that larger groups of cases may be presented in more detail. The material for such an index may be accumulated from personal interviews, hospital records, and questionnaires to the attending physicians. A questionnaire investigation was started by Dr. O. Lee Schattenburg in 1935, and by 1940 complete coverage of maternal deaths had been accomplished. Dr. Schattenburg died in 1943 and the questionnaire lapsed. In June, 1946, the same type of investigation was started again with good results, and with excellent cooperation from the physicians.

In May of last year, the President of the Territorial Medical Association appointed a three-man maternal mortality committee. The first action of this committee was to request a report on maternal deaths and suggest that from time to time cases of maternal mortality be presented to the local medical societies for analysis and discussion.

Through a medium of this type, careful observance can be made of the factors involved in producing maternal mortality, and the necessary means can then be taken to prevent them.

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Epidemic Keratoconjunctivitis

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EPIDEMIC keratoconjunctivitis is not a newcomer to the Hawaiian or the national scene. U. S. ophthalmologists remember all too clearly the contagiousness, the severity, the drawn out course, and the corneal complications of the epidemic which started in Hawaii in 1940 and by 1942 had traveled from coast to coast.

The disease has been noted spasmodically over the past several years. Since January 1949, however, there has been a notable increase in the number of patients seen with virus conjunctivitis.

The symptomatology is essentially the same as during the 1940 epidemic. However, the disease has a milder course and is of a shorter duration, usually not lasting over three to four days. Patients complain of sudden onset of pain and lacrimation, usually only in one eye. There is no discharge, and conjunctival scrapings reveal no organisms on smears or culture. Sub-conjunctival hemorrhages are noted in almost every case. Photophobia, ptosis, preauricular swelling and punctate corneal opacities are noted in the more severe cases. The second eye is seldom involved.

In a group of 58* known cases in the present series, there were only two families in which more than one member was afflicted.

The treatment is symptomatic. Sulfacetimide, duomycin, bacitracin, penicillin, sulfathiazole, antiseptics, hot and cold applications, convalescent serum, and X-ray therapy, all have their advocates.

In my hands, duomycin ophthalmic and 15 per cent sulfacetimide along with 1:3000 bichloride of mercury ophthalmic ointment have been of most value; cold applications have also been appreciated by the patients. No therapeutic agent, however, is of value in preventing the formation of corneal infiltrates.

Fifty-eight new cases are far too few to be considered a widespread epidemic; furthermore, failure of the disease to appear among army and navy personnel also speaks against the condition's having assumed large scale epidemic proportions.

The purpose of this report is to serve as a word of warning to the medical profession against an extremely contagious disease which a few years ago was responsible for millions of lost man-hours and widespread suffering.

* Only 20 of the 58 cases were seen by me personally. I am indebted to Drs. F. J. Pinkerton, H. Moffat, M. Gordon, and Commander Mooney for data about the others. Drs. Wong, Minatoya, Ogawa, Hata, Cowan, Corboy, and Trexler have not noted an unusual increase in the cases of virus conjunctivitis seen in their offices.

Young Hotel Bldg.

Pneumatosis Cystoides Intestini

Causing Obstruction of the Small Intestine

M. GERUNDO, M.D., and M. L. CHANG, M.D.

CYSTIC pneumatosis of the intestine is a rather rare disease in man, although it has been found frequently in animals and especially in swine. Baumgartner[1] believes that there were only 120 cases on record in the world literature until 1943, but actually the number may be larger, as the disease may not give rise to clinical manifestations during life and may remain an accidental autopsy finding. One of us (M. G.) has had the opportunity to see this condition on several occasions at the autopsy table, but he has never taken the trouble to report his observations before because of lack of clinical correlation.

Diagnosis

The clinical symptoms, as reported in the literature, are usually vague abdominal pains of long duration, alternation of diarrhea and constipation, occasionally persistent diarrhea which may lead to an erroneous diagnosis of sprue, sometimes loss of weight, fatigue, pressure or dull pain at the site of the lesion, and palpation of an indefinite mass in the abdomen. Occasionally, there may be manifestations of obstruction because the cystic mass may restrict the lumen of the intestine.

Paz[2] has described a case of ileocecal invagination due to pneumatosis cystica of the terminal portion of the ileum. At the operating table, one sees cysts, ranging in size from a cherry to an apple, filled with gas. The cysts, commonly located in the ileum, very seldom elsewhere, may be single or multiple, unilocular or multilocular, and usually they have extremely thin walls. In the large majority of cases, the cysts are found just under the serosa and bulging out into the peritoneal cavity. Such an appearance is so characteristic that diagnosis is made immediately. In other instances, the cysts are located in the submucosa or in the muscular coat, and their nature may not be immediately apparent, as in our case. Of course, the cysts which bulge into the lumen and cause symptoms of obstruction or stenosis are those which more frequently come to observation during life. The disease often accompanies gastric ulcer or it may simulate pyloric stenosis.

Kaspar[3] and D'Istria[4] have studied the roentgenologic findings in this disease. Very often a pneumoperitoneum without signs of perforation is present, due either to rupture of the subserous cysts into the cavity or to diffusion of the gaseous content through the thin wall of the cyst.[5] Another common finding (called the Moreau-Chelaiditi sign, according to Kaspar) is the interposition of intestinal loops containing the cysts between the diaphragm and the liver. Unfortunately, it is not always possible to rely on the presence of such signs, because the cysts may be submucous or intramuscular and may not be very large in size.

The prognosis is in general very good, as the stenosis is virtually the only complication which may require prompt surgical intervention and resection of the affected segment of the intestine.

Etiology

There is no accord about the etiology and pathogenesis of the disease. Menna,[6] who has investigated the disease experimentally, reports that seven theories have been advanced to explain its mechanism:

1. Neoplastic theory. It is the oldest one, advanced by Bang, who in 1876, included cystic pneumatosis among neoplastic or hamartomatous lesions of the lymphatic system.

2. Theory of the hematoma. The cysts or vesicles according to this theory originate from hematomas consecutive to interstitial hemorrhages. Gas would be produced from extravasated blood.

3. Chemical theory. The gas might be derived from local cellular processes of fermentation or through increase in acidity of the small intestine and of the carbohydyrates present in the lymph of the lymphatics.

4. Theory of altered gaseous exchanges. This

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[2] Paz, J. R.: Ileocecal Invagination Due to Enterocystoma, Bol. y trab. Soc. argent. de cireyanos. 6:208, 1945.

[3] Kaspar, M.: Die Pneumatosis cystoides und ihre Rontgen symptome Zentrabbl. f. Chir. 69:226 (Feb. 7) 1942.

[4] D'Istria, A.: Possibilities of Roentgen Diagnosis of Pneumatosis Cystoides, Riv. di Chir. 6:1 (Jan.) 1940.

[5] Gandolfo Canessa, J. H., Lorenso y Losada, H., Garcia Capesso, F., Roglia, J. L.: Pneumatosis Cystica: Study Apropos of Case of Spontaneous Pneumo-peritoneum, An. d. ateneo, Clin. quir., 7:89 (March) 1941.

[6] Menna, L.: Pathogenesis of Pneumatosis with Special Reference to Role of Lymphangiitis: Experimental Study, Policlinico (ses. chirurgica) 47:220 (June) 1940.

view is based on histologic evidence of embryonal inclusions of respiratory elements, which at a certain period of life under the influence of various stimuli would take up their specific activity.

5. Parasitic theory. It is based upon a single case in which numerous parasites of the genus Trichuris were found near the cysts.

6. Bacterial theory. It receives the support of a large number of authors. Some authors believe that the disease is due to a specific agent, and particularly to a certain strain called bacterium coli lymphaticum aerogenis, which is capable of producing also an emphysematous vaginitis. However, other supporters of the bacterial theory deny the existence of a specific agent and believe that any gas-producing micro-organism in the intestinal flora may be a factor of disease.



Fig. 1—A drawing of a nodule magnified about ten times showing the formation of gas cysts. The slit-like space is a lymphatic vessel into which gas has penetrated and is gradually forming a cystic space. The mucosa of the intestine is reduced to a thin layer by the expanding cyst. (Drawn by G. L. Schwartz.)

Many objections have been advanced against this theory. It is not easily understandable why the inflammatory process should be limited to the lymphatics and should never give rise to similar manifestations in the mesentery or peritoneum. Furthermore, a lymphangiitis obliterans does not usually give rise to formation of cysts. The usual outcome of inflammation around vessels in the intestine is a process of sclerosis and diffusion of the peritoneum. In order that lymphangiitis may give rise to pneumatosis, another factor must be admitted which may be found in the next theory.

7. Mechanical theory. According to Menna, it is based upon three points of evidence: a) chemical composition of the gas; b) frequent association with other gastro-intestinal disease; c) experimental results. Analysis of the gas has given different figures in the hands of various authors, but in a general way, CO_2, N_2 and O_2 have been found constantly in various proportions. This theory holds that the gas gains access to the lymphatic spaces through minimal lesions and abrasions of the mucosa. Menna[6] has demonstrated experimentally that neither insufflation of air or intestinal gases alone nor infection by bacteria of low virulence is sufficient to produce cystic pneumatosis, but that a combination of the two mechanisms is necessary to induce the lesion. It is our opinion that possibly the mechanism of production of cysts may vary from case to case or may be due to multiple factors, which in the large majority of cases are mechanical and infectious.

Case Report

A 48 year old Filipino laborer was admitted to Hilo Memorial Hospital, Hilo, Hawaii with complaint of moderate gas pains in the epigastrium, belching, and inability to pass gas by the rectum. Previously in 1940, he had been admitted to Puumaile Hospital for tuberculosis with a diagnosis of advanced pulmonary tuberculosis. At that time, he complained of epigastric distress associated with gaseous eructating. Roentgenological examination of the gastroenteric tract was done and a diagnosis of tuberculosis of the small intestine made. One year later another examination gave identical findings. He was discharged sometime later with a final diagnosis of arrested pulmonary tuberculosis.

During the intervening years, the patient has had intermittent attacks of epigastric pain associated with gaseous eructations. In 1943, a probable diagnosis of peptic ulcer was made. Since then he has had several similar attacks at various intervals.

The day before the admission, he had been seen by one of us (M. L. C.) At that time a soft sausage-shaped mass was palpable in the upper abdomen which changed in size and shape and had visible peristaltic movements. A diagnosis of partial obstruction due to tuberculous enteritis was made and an operation advised. A flat plate of the abdomen revealed dilated loops of small bowel. A small amount of barium given by mouth failed to pass the pylorus after 9 hours and it was still present in the dilated loops of small bowel after 24 hours. The roentgenological sign of Moreau-Chelaiditi of interposition of affected intestinal loops between the diaphragm and the liver was not present.

Laboratory examinations showed trace of albumin and a few red cells in the urine; a blood count of 4,000,000 red cells, 80% hemoglobin, 70% polymorphonuclears; absence of blood and parasites in the stool.

At the operation, two large nodules were seen glimmering through the wall in the last portion of the ileum. A provisional diagnosis of colloid carcinoma was made and a segment of about 40 cms. in length was resected with an end-to-end anastamosis.

The immediate postoperative course was uneventful. The patient died sometime later of a cause entirely unrelated to cystic pneumatosis.

Pathologic Examination (M. G.)

On opening the lumen of the resected intestinal segment, two large nodules of about four centimeters in diameter bulge into and partially occlude the lumen. The intestinal mucosa is stretched thinly over the nodule but no erosion or ulceration or inflammation is present either on the surface of the nodule or in the surrounding mucosa. On pressure, there is a peculiar crackling sensation as if the nodule contained air. On section, the nodules consist of multilocular air containing spaces formed by thin fibrous septa. There is no proliferation or papillary growth of the cystic walls.

Microscopic examination shows irregular spaces which occupy the submucosa and muscular coat. The spaces are lined by stretched-out endothelium and are surrounded by loose fibrous tissue containing here and there few round cells. Where the spaces are small, they appear to be continuous with slit-like vessels of which they seem to be ectatic pouches. Few of the small cystic spaces near the mucosa contain stagnant lymph. For the muscular coat, the muscle fibers in the vicinity of cystic spaces are many times broken or replaced by young collagenous tissue. For these areas, the presence of polymorphonuclears, eosinophiles and lymphocytes point to an inflammatory process.

The mucosa over the nodules is thinned by stretching, but with exception of small foci of round cells shows nothing relevant. There is no proliferation of the endothelium nor formation of new vessels. The whole process suggests a mild inflammation around lymphatic vessels.

Diagnosis: Pneumatosis cystoides intestini.

Comment

Diagnosis in this case was not reached until a pathological examination of the specimen was made. Looking at the symptoms retrospectively, we may now easily understand the whole process. For our case, the disease was of long duration and characterized by vague gastro-intestinal disturbances. The fact that this patient had been an inmate in an institution for tuberculosis led to an erroneous diagnosis of tuberculous enteritis. During the course of his illness, he presented signs which were interpreted at one time as those of peptic ulcer but successive events and autopsy findings did not confirm this diagnosis. The possibility of a cystic pneumatosis was never entertained by anyone of the various attending physicians who saw him because of the extreme rarity of the disease. However, after seven years of continuous disturbances, he was not emaciated, had lost no weight and in the intervals between attacks he had good appetite and was able to attend to his daily tasks. A progressive tuberculosis or neoplastic lesion would have already given clear signs of its presence during such a long period of time. The symptoms of partial stenosis of the intestine were due to the bulging of the nodules into the intestinal lumen and not to strictures produced by tuberculous ulcers.

As to the pathogenesis of the disease in our case, microscopic findings seem to support a mechanical infectious origin, as we find ectatic pouches without surrounding inflammatory reaction as well as areas where there is a definite inflammatory reaction and beginning sclerosis.

Summary

A case of pneumatosis cystoides intestini has been reported. The patient had had vague gastro-intestinal symptoms for many years and had been erroneously diagnosed as tuberculous enteritis and peptic ulcer on various occasions.

The study of the pathological specimen seems to support a mechanical infectious theory to explain the pathogenesis of the disease.

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Intravenous Procaine: New Uses for An Old Drug

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IN THE past few years a number of workers have reported the use of procaine intravenously, in the treatment of a rather large variety of diseases and conditions, including burns, allergy, pain of all kinds, arthritis, orthopedic conditions, and cardiac arrhythmias. Others have used the technic in obstetrics and surgery with good results. Procaine can be given in the ward with perfect safety, using standard intravenous equipment. Two of our patients were nurses who received infusions in the emergency room and were able to get up immediately and go home without assistance.

All the procaine given is taken out of the circulation in twenty minutes by the liver.[1] An enzyme, procaine esterase, has been demonstrated by Goldberg, Koster, and Warshaw,[2] who have proved that all procaine is hydrolyzed to para-aminobenzoic acid and diethylaminoethanol. Because of this chemical action, no delayed reaction or cumulative effects are likely.

The mechanism of pain relief is probably best explained by Allen,[3] who offers the theory that capillaries are more permeable in injured and inflamed areas, and the procaine diffuses into regions of pain, injury, inflammation, or edema, anesthetizing nerve endings there. Procaine given intravenously will be concentrated seven or eight times more in traumatized tissue than in normal tissue.[4] And one of the breakdown products, diethylaminoethanol, has a structure similar to that of benadryl,[5] giving an antihistaminic effect, as well as analgesia. In addition, the blood vessels in the injured area are dilated, increasing the local blood supply. Moreover, Sollman[6] has demonstrated that procaine depresses the irritability of skeletal muscle. Evidence shows that cardiac muscle irritability is also decreased. As a result, intravenous procaine is an excellent treatment for many types of pain, and Allen[7] is still looking for a type of pain that will not respond to it.

Lundy[8] used one gram of procaine in 500 cc. of saline to relieve the pruritus of jaundice. Gordon[9] used the same dosage to stop the pain of severe burns and also for changing burn dressings painlessly. McLachlin[10] used procaine for post-operative pain and found it better than morphine. He gave as much as one gram of procaine every six to eight hours, without harm, and also without the depressant effects of morphine. Allen[7] gave much more massive doses—as much as ten grams of procaine in 800 cc. of 5 per cent glucose, with relief of pain and no severe reactions. Wangensteen[11] gave procaine for delayed serum sickness, with very excellent results. Applebaum, Abraham, and Sinton[12] treated serum sickness in the same way with success. Rosellini and Van Rooy[13] reported a delayed penicillin reaction, consisting of generalized urticaria and puffiness of the face, hands, and feet. All conservative methods of therapy failed, so one gram of procaine was given in 500 cc. of saline. All the symptoms subsided, and on the following day a repeat dose rendered the patient completely symptom-free. In France, Ameuille[14] has administered small amounts of 1 per cent procaine in asthmatic crises, pulmonary emboli, angina pectoris and chronic dyspnea. Other French workers[15] claim good results in acute nephritis from sulfa reactions, asthma, and arthropathies.

Procaine is useful also as a cardiac depressant. Burstein[17] mentions three cases where ventricular fibrillation, proved by electro-cardiograph, oc-

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[17] Burstein, C.: Treatment of Acute Arrhythmias During Anesthesia by Intravenous Procaine, Anesthesiology 7:113 (Mar.) 1946.

curred during anesthesia, and was reversed by five to seven cc. of 1 per cent procaine. Stutzman, Allen, and Orth[18] cite a case where procaine failed to reverse ventricular fibrillation, which had been caused by cyclopropane and epinephrine. Lampson, Schaeffer, and Lincoln[19] used procaine intravenously and direct cardiac massage on a seven-year-old boy who developed ventricular fibrillation under ether anesthesia. An electrocardiographic tracing showed the heart to be fibrillating, then after three cc. of procaine, it showed a slowing of the impulses, and finally after another dose of procaine, normal rhythm began again. In this case, the heart fibrillated for twenty-six minutes, but a careful follow-up showed no bad effects and no apparent brain damage. Lampson *et al.* recommend procaine in arrhythmias rather than epinephrine, which increases the irritability of an already irritable heart, while procaine tends to restore normal rhythm. Tovell and Barbour[20] recommend procaine intravenously not only for anesthetic emergencies, but also for routine use prophylactically in all intrathoracic operations where cardiac arrhythmia is to be feared. They have used this procedure at the Hartford Hospital for one and one-half years with good results.

In obstetrics, Allen[3] first reported twelve deliveries done under 1 per cent procaine intravenously, with no harm to the mother or the baby. The only difficulty has been from occasional convulsions, not dangerous, and controllable by barbiturates. Schahmann[21] has reviewed the subject, and feels intravenous procaine is a safe type of obstetrical analgesia. For surgery, Allen, Crossman, and Lyons,[22] in 1946, gave 1 per cent procaine by vein in two cases. One was a hip nailing, the other a cholecystectomy. Kraft[23] summarized 870 operations where procaine was used as an adjunct to the usual inhalation or spinal anesthesia. A smaller dose of the main agent was required, and this technic was found to be especially good in elderly or poor-risk patients. In his series, one gram of pentothal and one gram of procaine were given per hour, in 1:1000 strength. There were no signs of overdosage. Fraser[24] has also had good results with this pentothal-procaine mixture.

In this connection, since most patients coming to surgery receive intravenous fluids both during and after the operation, it seems reasonable to suggest that a gram of procaine be added to each 500 cc. of solution. This would allow the patient to be carried under lighter general anesthesia during the operation, and to have his post-operative pain relieved without using any morphine, with its undesirable side-reactions, especially respiratory depression.

In a previous paper[25] I recommended that patients in the acute stages of rheumatic fever, glomerulonephritis, and periarteritis nodosa be treated with procaine infusions, because all three of the diseases are apparently hypersensitivity reactions, and procaine has been proven to be effective in treating hypersensitivity reactions. We have found, in preliminary work on one case, that intravenous procaine will stop the joint pain of acute rheumatic fever. The theory still appears valid, and I would like to repeat the suggestion that intravenous procaine be used in the acute stages of rheumatic fever, glomerulonephritis, and peri-arteritis nodosa, and add disseminated lupus erythematosus, because this mysterious disease seems also to be a hypersensitivity state.

To date we have given thirty-six infusions at The Queen's Hospital, to twelve patients. There have been no serious reactions. The one reaction was due to an error in mixing. The patient was a 28-year-old Chinese male with an advanced carcinoma. He had been receiving ¼ grain of morphine sulfate p.r.n. and one ampule of cobra venom daily. Intravenous procaine was tried, because his pain had not been completely relieved by the former drugs. About twenty minutes after the infusion was started, the patient complained of nausea and began to vomit. He also began showing some muscular twitching. The flow was stopped, and the mixture checked. It was discovered that through a mixing error, ten grams of procaine had been dissolved in 500 cc. of fluid, making a 2 per cent solution. The intravenous was discontinued immediately. The patient had no pain for five hours, and needed only four doses of demerol in the next two days. He continued to have occasional muscular twitchings during these two days, but showed no harmful effects.

The following case report illustrates the value of this drug in a skin disease.

[18] Stutzman, J. W., Allen, C. R., & Orth, O. S.: Failure of Procaine to Reverse Cyclopropane-Epinephrine Ventricular Fibrillation, Anesthesiology 6:57 (Jan.) 1945.

[19] Lampson, R. S., Schaeffer, W. C., & Lincoln, J. R.: Acute Circulatory Arrest from Ventricular Fibrillation for Twenty-seven Minutes, with Complete Recovery, J. A. M. A. 137:1575 (Aug. 28) 1948.

[20] Tovell, R. M., & Barbour, C. M.: Experiences with Procaine Administered Intravenously. Presented at a joint meeting of the Am. Soc. of Anesthesiologists, Inc., & the Anesthesiology Section of the Los Angeles County Medical Association, Los Angeles, Calif., April 10, 1947.

[21] Schahmann, O.: Painless Childbirth, South African M. J. 21:597 (Aug. 23) 1947.

[22] Allen, F. M., Crossman, L. W., & Lyons, L. V.: Intravenous Procaine analgesia, Anesthesiology & Analgesia 25:1 1946.

[23] Kraft, K. A.: Intravenous Procaine, Canad. M. A. J. 57:350 (Oct.) 1947.

[24] Fraser, H. J.: Intravenous Pentothal Procaine Analgesia, Anesthesiology and Analgesia 27:159 (May-June) 1948.

[25] Horan, J. S.: A recommendation for the use of intravenous procaine in rheumatic fever, glomerulonephritis, and periarteritis nodosa. Read at The Staff Meeting, Kauikeolani Children's Hospital, Honolulu, April 26, 1948.

Case Report

Mrs. S., an 86-year-old Danish woman, entered the hospital complaining of intractable itching and pain in the legs, and severe dermatitis with itching in the arms. Her legs were a fiery red, and the pain was severe enough to make her weep constantly when she talked. She showed little or no response to stilbestrol and lotions. She was given one gram of procaine in 500 cc. of saline solution, rather rapidly, with slight improvement. A second dose was given two days later, over a period of four hours, with immediate relief. The inflammation on the legs subsided and the itching became much less intense. Improvement continued steadily after the second infusion and the patient became much better. Her whole outlook brightened, she began talking without tears, and was discharged very much improved.

All twelve patients were benefited, as shown in the following table:

SEX AND AGE	DIAGNOSIS	RESULT	REACTION	NO. OF INFUSIONS
Male 28	Advanced cancer	Relief of pain	Nausea, vomiting, twitching (mixing error)	1
Female 28	Tuberculosis, bronchiectasis abdominal pain	Relief of pain for two months	None	2
Male 39	Hypertension, uremia, acute nephritis, uremic itching	Relief of itching	None	3
Male 69	Rheumatoid arthritis	Relief of pain	None	8
Female 86	Stasis dermatitis, itching and pain	Relief of pain and itching	None	2
Female 32	Rheumatoid arthritis	Improved	Slight euphoria	1
Female —	Allergic dermatitis	Temporary relief	Anxiety, restlessness	2
Male 38	Arthritis	Complete relief	None	8
Female 24	Pleurisy, dyspnea	Relief of pain & dyspnea	None	2
Female 63	Severe pain from inoperable cancer	Relief of pain	None	2
Male 26	Urticaria; itching	Relief of itching	None	2
Female 34	Pleuritic pain; dyspnea, & cough	Relief of pain & dyspnea	None	3

The technique is very simple. We have found the one-gram ampules of crystalline procaine* to be most satisfactory for mixing. The procaine is easily dissolved in five cc. of sterile water or saline solution, and then added to the intravenous solution, with shaking. As a special precaution to rule out procaine allergy, it is advisable to inject 1 cc. of 1 per cent procaine intradermally as a skin test and then wait fifteen minutes to check for reactions. The infusion is started in the routine manner, usually at around 40-80 drops per minute. Pain or itching is relieved in ten minutes or less. The patient may feel a sensation of warmth throughout the body, and a slight blush may be seen around the head, face, and neck. There may be a metallic taste in the mouth and light-headedness. Numbness is quite often described as being felt over the whole body. If the solution is given faster, the patient may become dizzy and apprehensive, and while these reactions are harmless, it is probably better to avoid them by slowing the rate of the infusion. As a general rule, the patients like this treatment very much.

As to the safety of this procedure, Graubard *et al.*[5] have given over 2,000 infusions without having to use sedatives, oxygen, or stimulants. At the same time, they had noted no case of procaine sensitivity or any contraindication to the use of the drug. They have selected a dosage of 4 milligrams per kilogram of body weight, in 1:1000 dilution, which they call a procaine unit. Bruger,[5] in a discussion of this work, said, "The opportunity presented itself . . . to follow the variations in blood chemistry in patients receiving a procaine unit as defined in the above paper intravenously twice weekly. Renal aspects were evaluated by the determination of the whole blood urea nitrogen, nonprotein nitrogen, and by urine analysis; hepatic damage by the cephalin-cholesterol flocculation test and by thymol turbidity; general metabolic alterations by whole blood sugar (true glucose) and serum cholesterol. Sedimentation rates were also determined. The chemical studies were carried out at weekly intervals, a total of 17 such studies being made before and during the course of procaine therapy in five patients. No significant alteration in any of the chemical constituents of the blood was noted. Urine analysis failed to reveal any renal irritation. It would appear safe to state at this time that procaine administered intravenously twice weekly over a period of one month in the doses indicated has no measurable effect on renal or hepatic function, nor does it alter the sugar or cholesterol content of the blood or the rate of sedimentation of the red cells."

Summary

While no claim is made that intravenous procaine is a panacea, it has a rather wide therapeutic spectrum that makes it very helpful in treating pain, itching, arthritis, and burns. It has an antihistaminic effect that works well in hypersensitivity reactions. It has been used successfully in obstetrics and in surgery. In small doses, it will control ventricular fibrillation. And the use of intravenous procaine is suggested for the acute stage of rheumatic fever, glomerulonephritis, periarteritis nodosa, and disseminated lupus erythematosus. In twelve cases at The Queen's Hospital we have used the drug thirty-six times without a harmful reaction and with good results.

*Furnished through courtesy of Winthrop-Stearns, Inc.

The Queen's Hospital.

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[EDITORIALS]

PROGRAM OF THE AMERICAN MEDICAL ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE AND PUBLIC HEALTH

1. A Federal Department of Health. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine, and the coordination and integration of all Federal health activities under this Department, except for the military activities of the medical services of the armed forces.

2. Medical Research. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.

3. Voluntary Insurance. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas. Aid through the states to the indigent and medically indigent by the utilization of voluntary hospital and medical care plans with local administration and local determination of needs.

4. Medical Care Authority with Consumer Representation. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.

5. New Facilities. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas in which the need can be shown and with local administration and control as provided by the National Hospital Survey and Construction Act or by suitable private agencies.

6. Public Health. Establishment of local public health units and services and incorporation in health centers and local public health units of such services as communicable disease control, vital statistics, environmental sanitation, control of venereal diseases, maternal and child hygiene and public health laboratory services. Remuneration of health officials commensurate with their responsibility.

7. Mental Hygiene. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.

8. Health Education. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.

9. Chronic Diseases and the Aged. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.

10. Veterans' Medical Care. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care, including care of the veteran in his own community by a physician of his own choice.

11. Industrial Medicine. Greater emphasis on the program of industrial medicine, with increased safeguards against industrial hazards and prevention of accidents occurring on the highway, at home and on the farm.

12. Medical Education and Personnel. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

MEDICAL SERVICES ESTABLISHED BY THE HAWAII CANCER SOCIETY

One year ago this month, the newly-organized Hawaii Cancer Society held its first public campaign for funds. The goal was $50,000, sufficient for the limited initial program visualized. The conclusion of the campaign, however, saw over $70,000 on hand, reasonable evidence that the people of Hawaii are "cancer conscious" and anxious to deal with this problem on a wide scale.

The bulk of the money received in 1948 has gone into public education and into organizing the Society on a firm basis, one that will be capable of aiding the medical profession and the general public through an effective, long-range program.

The problem of providing medical services was approached cautiously and investigated thoroughly by a medical service committee organized within the Cancer Society. Membership of the committee consists of Thomas F. Fujiwara, M.D.; Max Levine, Ph.D.; Walter B. Quisenberry, M.D.; Frank C. Spencer, M.D.; I. L. Tilden, M.D.; K. S. Tom, M.D. and Laurence M. Wiig, M.D., with the writer as chairman.

One of the first possible services investigated by the committee, and the first subsequently approved, is the cytologic diagnosis of cancer by the smear technique.[1] This diagnostic technique was devised by Dr. George N. Papanicolaou over thirty years ago, but has only recently attained wide recognition.

The medical service committee decided to follow the mainland pattern in the use of this technique: 1) The service will be made available on a Territorial-wide basis; all physicians will be eligible to send vaginal smears obtained from patients to a laboratory set up in Honolulu by the Cancer Society; 2) A technician will be trained to screen the slides; 3) A board of cytologists, consisting initially of Dr. Quisenberry and Dr. Tilden, will examine suspicious slides; 4) Report of the findings will be made promptly to the physician using the service.

Present difficulty obstructing immediate establishment of the service is the necessity of training a laboratory technician. One was recently sent, under a scholarship provided by the Hawaii Cancer Society, to take a four month course under Dr. Herbert F. Traut at the University of California Medical School in San Francisco.

It is proposed to restrict the use of the cytologic method in Hawaii to vaginal smears, at the present time. However, investigations on the mainland are proceeding on the use of this method in examinations of the pulmonary, gastrointestinal and urinary system, with varying, but generally encouraging results. As more experience is gained by workers in applying this technique to various sites of the body, it seems likely that its accuracy will be increased. Undoubtedly, its use in Hawaii will be extended, at some time in the future, to sites other than the female genital system.

A second concrete step taken by the Hawaii Cancer Society to place its funds and services at the aid of the medical profession, was its decision to extend financial support to the tumor clinics now in existence and to assist in the establishment of additional tumor clinics.

A preliminary sum of $5,000 has been allocated to a special "tumor clinic fund." This money is at the disposal, as needed, of the tumor clinics now in operation at Queen's and St. Francis Hospitals. The same will be done for other clinics organized in the Territory of Hawaii.

To determine the need for a Home Nursing Education Service for cancer patients, the Hawaii Cancer Society, under the auspices of the Cancer Committee of the Territorial Medical Association, surveyed all physicians on Oahu during December, 1948. Results of the survey being favorable (yes: 72%; indefinite: 21%; no: 7%), Mrs. Esther M. Stubblefield[2] was appointed director of the service that is now established and in the process of expansion.

This service is not visualized as a bedside nursing program, but rather a program to provide nursing education to cancer patients and their families and to provide for general welfare, where appropriate.

During the past year the Hawaii Cancer Society, while proceeding cautiously, has established a firm basis on which to grow and render additional services to both the medical profession and the general public. Projects now being conducted, or soon to be established, include, in addition to the cytologic service, support of tumor clinics and the Home Nursing Education Service, an educational program for the medical profession including firms and seminars conducted by qualified cancer authorities brought from the mainland for the purpose, and an educational program for the general public, including the establishment of an Information Center and making full use of pamphlets, newspapers, radio, films and speakers.

GROVER M. BATTEN, M.D.

[1] Quisenberry, W. B.: The Cytologic Diagnosis of Cancer by the Smear Technique, HAWAII MED. J. (Sept.-Oct.) 1948.

[2] Nursing Supervisor, Kapahulu Health Center, Territorial Department of Health.

CONSTRUCTIVE CRITICISM BY PATIENTS

It appears from Newsletter Number Twelve of the Hawaii Medical-Dental Public Relations Committee, published January 31, that a public opinion poll was conducted by Mr. Stegen during his recent visit to Hawaii. One question asked was: "What, if anything, do you think physicians and dentists could do to improve their services to you and the community?" Nine of the answers said to have been given repeatedly were as follows:

1. Keep appointments more promptly.
2. Make home calls when needed, particularly at night.
3. Spend more time with patients.
4. Improve the content of their office help.
5. Treat a smaller number of patients.
6. Have office hours at more convenient times for workers.
7. Reduce costs of medicine and appliances.
8. Be more cheerful.
9. Tell me what's actually wrong with me.

As the Newsletter says, these are things we should be thankful patients tell us. Some of them could and should be done. It is interesting that five of the nine complaints—numbers 1, 2, 3, 5 and 6—center around the availability of the doctor to the individual patient. This is likely to be one of the most serious stumbling blocks to the success of any plan of socialized medicine, for in any such plan the doctor will find himself required to treat very large numbers of patients in order to make a living, and also in order to satisfy the greatly increased demand for medical care. Paper work, too, will occupy a great deal of every doctor's time: a recent correspondent to the *British Medical Journal* wrote that he expected to have to devote his entire morning, every Saturday, to filling out and signing certificates of inability to work.

This sort of thing is a constructive approach to the whole problem, far above the name-calling level. We could use more of it.

FOUR BLIND MEN FEEL AN ELEPHANT *

"The hospital was large, modern, and well-appointed, but the lift had stuck midway between the sixth and seventh floors. The five men had pressed the buttons and rattled the gates for some time in vain.

" 'Where did you want to go, Sir Charles?' asked the tall one who looked like a matinee idol. The famous cardiologist shrugged wearily. 'Some case Pulse-Palpable asked me to see for him in Fourteen: sounds like a heart-block after a coronary thrombosis, but he can't make out the E. C. G. And you?' he concluded politely. 'Oh, I'm going the same way, sir, to see a query aphasia or dementia. May have to call you in, Alec.' He glanced indolently at a bespectacled man with a dome-shaped forehead. 'Well, if you want me,' said the psychiatrist, 'I've got a chap to see that sounds like an Alzheimer in Fourteen, so I can kill two birds.' The fourth man had been pacing from side to side and peering into the lift-shaft. 'What a confounded waste of time this is,' he burst out. Got to be at Moorfields by four. I only came up to look at some fellow's discs, too.'

"The ruddy-faced elderly man in the raglan murmured sympathetically, 'I'm rather busy myself—I'm a G. P.' The others smiled politely, and he went on, twisting an old felt hat in his big hands, 'One of my patients is in here, pretty ill, poor chap, and I promised his missus I'd look in and see him. Used to be a hefty fellow, too; played for years in our local soccer team. He was a jolly good goalkeeper, old Jack. Robinson his other name is; perhaps some of you gentlemen know him?' They shook their heads. The lift gave a jerk. As it started slowly to ascend, the four consultants glanced hastily at the Request for Opinion cards in their hands. All four cards read: *Robinson J. Male. C. of E.* 25, 302. *Wd.* 14."

* In England Now (A Running Commentary by Peripatetic Correspondents), Lancet 2:988 (Dec. 18) 1948.

INTRAVENOUS IRON

Slack and Wilson of the Manchester Royal Infirmary have recently[1] reported a clinically practicable method of administering iron intravenously in the treatment of iron-deficiency anemia. Their preparation,[2] which is made from ferric chloride and sucrose by a special technique of alkalinization, contains about 2 per cent elemental iron; it is stable at room temperature for at least a year; the dose they recommend is 0.2 gm., since larger amounts, aside from requiring an inconveniently large syringe, may induce mild iron intoxication. They have administered over 800 such injections to 60 patients with only one mild reaction and four small venous thromboses. Most patients were given two doses daily for 10 days, for the treatment of anemia due to hemorrhage, infection, or pregnancy plus menorrhagia. Utilization of the iron approximated 100 per cent, even in the 10 cases which had previously proved refractory to large doses of iron by mouth over long periods.

[1] Slack, H.G.B., and Wilkinson, J.F.: Intravenous Treatment of Anemia with an Iron-Sucrose Preparation, Lancet 1:10 (Jan. 1) 1949.
[2] Supplied under the name "Ferrivenin" by Benger's, Ltd.

Postgraduate Lecture Series, 1948

II. TUMORS OF THE LUNG AND BRONCHI

PAUL KLEMPERER, M.D. *

Tumors originating in the lungs have become of major importance within the last 25 years. While in former years they seemed to have been of rather infrequent occurrence, today primary tumors of the lungs are among the most frequent malignant tumors we know. They rank second only to the tumors of the alimentary tract. There is a prevalence among the male, but the female is also affected by malignant neoplasms of the lung.

Incidence

Because of the apparently unusual increase in the frequency of carcinoma originating in the lungs, considerable discussion has arisen whether there is an actual increase or whether pulmonary carcinoma is only better recognized due to our improved methods of diagnosis by roentgen rays and particularly by bronchoscopy. These methods are certainly responsible for the diagnosis of pulmonary tumors during the life of the patient. Therefore, clinical investigators believe that the increased frequency of pulmonary carcinoma of today is not real. Some pathologists agree with this point of view. I personally do not agree, for the following reasons: I still remember the years before the first world war when primary tumors of the lung were rather infrequently observed. But I believe that pathologists competent in diagnosis and able to examine the bodies recognized carcinoma just as well as we do it today. I recall that in those years when I was still working in the old country we saw about once a month a primary carcinoma of the lung in about 1500 autopsies a year. It was definitely rare. Moreover, there are statistics of continental pathologists which date back to the middle of the last century. For instance, there is one report from the University of Goettingen, and another statistical review from the University of Budapest. In these places there were competent men in charge of the autopsy service and the records of these institutes going back to 1860 revealed that there is a definite increase in the frequency of pulmonary carcinoma observed at autopsy, and this increase started at the end of the first World War. However, we are entirely ignorant as to the cause of this increase. Several reasons have been suggested, among them the effect of the influenza epidemic of 1918-1919 upon the mucosa of the respiratory tract. It is well known that during and after influenza the epithelium of the respiratory tract frequently shows metaplasia as a result of the inflammation. It has been maintained that this metaplastic bronchial epithelium may undergo carcinomatous degeneration more easily than normal cells do. I have my doubts about this explanation, because we have had influenza epidemics in years before 1918. For instance there was an epidemic of the same dimensions in 1892-1893. We have good clinical and anatomical records of this pandemic and the findings of these years were fully identical with the observations made in 1918, so one should assume that similar consequences would have taken place. Other authors have attributed the increase in pulmonary carcinoma to the influence of modern technical developments: for instance, it has been maintained that the exhaust gases of automobiles might contain carcinogenic substances. Others suggested the inhalation of carcinogenic material from the tarring of roads which has been used in the last 25 years. Against this hypothesis one might object that increase of carcinoma of the lung has been also observed in rural countries, such as Hungary and Russia. Therefore, I do not know whether one should seriously consider this explanation. Of course, smoking, especially of cigarettes, has been accused as the cause of the increase. I wonder whether the prevalence of pulmonary carcinoma in the male fits in with this hypothesis. I rather believe that we simply do not know and that we have to confess our ignorance as to the cause of the conspicuous increase because we know so little about the reason of malignant growths in general.

Varieties

I would like to demonstrate today the gross anatomical features of carcinoma originating in the lung with reference to the clinical course and adapted to the need of the clinician who sees carcinoma, on x-ray examination as well as by bronchoscopy and at operation. We can roughly divide from a practical point of view the carcinomas of the lung into those which arise and are located near the hilus and those which are situated distant from the hilus. The latter have frequently been spoken of as peripheral or parenchymal carcinoma. I would prefer the term peripheral to parenchymal carcinoma because the term parenchymal implies that this carcinoma might not originate from the bronchial epithelium but from structures we might call the parenchyma of the lung, the so-called respiratory epithelium. As you will see from the demonstration we have no reason to believe that there is a large number of carcinomata, the origin of which cannot be traced to the bronchial epithelium, although there is a small number in which we must consider the possibility of their origin from cells which belong to the pulmonary parenchyma rather than to the bronchial epithelium. If we accept this classification for the sake of convenience, I should like to start first with tumors which originate in the main bronchi which are therefore in their location hilar tumors.

Hilar Carcinoma

The first slide illustrates a tumor of the right main bronchus. The left bronchus is free of changes while the right bronchus shows a ragged tumor mass which infiltrates into the trachea. Distally, the tumor does not extend into the bronchial ramifications. You see that the wall of the bronchus, lateral as well as medial and at the bifurcation, is thickened. This is due to the advance of the tumor, which originated in the mucosa and projects into the lumen, but at the same time infiltrates into the wall. This infiltration can well be seen on the next picture. It shows a relatively sharply circumscribed tumor. The bronchial wall is thickened; there is also a very striking infiltration of the adjacent

Read before the Post Graduate Session of the Honolulu County Medical Society, May 13, 1948.

*Pathologist to Mount Sinai Hospital and Professor of Pathology, Columbia University, New York City.

lymph nodes, which present the usual white color of the bronchial carcinoma. On a cross section we see that the wall is diffusely infiltrated and the neoplasm invades into the lung parenchyma. In this way the neoplastic extension radiates in a fan-shaped manner into the lung parenchyma at the hilus. This can be seen on roentgen examination, where one can also see the widening of the mediastinal structure such as regional lymph nodes, and as you will see in some of the subsequent pictures the infiltration may progress into the adjacent mediastinum.

So far we have seen tumors which projected into the lumen and therefore could easily be seen on bronchoscopic examination as bulging tumor masses which have an irregular ulcerated surface. The tumor which you see next differs in that respect; we do not see a single prominent mass but the entire length of the bronchus is diffusely infiltrated. This type of bronchial carcinoma infiltrating the wall can be compared with the diffuse scirrhous carcinoma of the stomach. In this type of gastric carcinoma there is no sharply circumscribed tumor but the entire body of the stomach is infiltrated in a diffuse manner.

You can well compare this situation in the anatomical specimen with the findings at bronchoscopy. These are the cases in which the lumen of the bronchus is narrow, due to a diffuse thickening of the bronchial mucosa; in such instances biopsy is not easily performed because one has to take a sharp bite in order to obtain a specimen. Nevertheless, the bronchoscopist familiar with the appearance of carcinoma will recognize the neoplastic nature of the involvement. I understand that the bronchoscopist in certain instances may find it difficult to distinguish between this type of carcinoma and indurations of the bronchus due to chronic inflammation. I wonder whether the picture in some fibrosing types of tuberculosis might not be similar, because I have obtained occasionally bronchial biopsies with the clinical diagnosis of carcinoma in which tuberculosis was found on histological examination.

Peripheral Carcinoma

We have seen so far carcinomata which originated in the main bronchi or in the bronchi of second order. In the next picture we see the lower lobe bronchus perfectly free at its beginning; but in a branch bronchus of the fourth order there is a small tumor infiltrating into the adjacent lung. You can realize that this infiltration is distant from the hilus, and it will therefore impress one on x-ray examination as a shadow within the periphery of the lung.

This point is well demonstrated in the next specimen. Here you see the first ramifications of the bronchus, which are normal. There is a large carcinomatous lymph node in the hilus. Very close to the pleura there is a round tumor infiltration, relatively sharply separated from the surrounding lung tissue except that one can see gray streaks radiating into the vicinity. The overlying pleura is distinctly thickened. If we view this tumor only superficially we might think that there is no relationship to a bronchus. Such tumors have therefore been considered as parenchymal carcinoma. If one examines more carefully, however, one can see a lumen of the bronchus in the center surrounded by dense carcinomatous tissue. The carcinoma originated from this peripheral branch bronchus. On histologic examination of such carcinomata one can recognize very clearly that they arise in the bronchus because their cell types are identical with those seen in the hilar tumors. They are also epidermoid [squamous cell—Ed.] carcinomata of greater or lesser maturity. By anatomic and histologic examination we can ascertain that the greater number of the carcinomata of the lung originate within bronchi of the main or subsequent order. Those which take their origin in branch bronchi of small size appear topographically as peripheral tumors.

Consequences of Carcinoma

We now come to the problem of the consequences of the carcinoma of the bronchus, and the correlation with certain clinical symptoms. Furthermore, we have to consider the sequelae in the course of the development of bronchial carcinoma and the question why patients die with carcinoma of the lung. Regarding these problems we pathologists have received a good deal of new information because of close cooperation with clinicians, bronchoscopists and surgeons. In former years, we were familiar only with the terminal stages of carcinoma. For this reason we have reached an erroneous idea regarding the natural history of bronchial carcinoma.

For instance, we have entertained the opinion that all carcinomata of the bronchi are rapidly growing tumors which disseminate fast and very widely. In former years when we were familiar only with the post mortem picture of carcinoma of the bronchus we were impressed by the widespread metastases. Since clinical symptoms apparently had only been in existence for a few weeks or months, we concluded that carcinoma of the bronchus is an extremely rapidly progressive tumor. This cannot be believed any more, because we have better information as to the course and evolution of carcinoma of the bronchus since clinicians, surgeons and bronchoscopists have devoted so much thought and interest to the clinical manifestations of bronchial carcinoma.

I show here a resected specimen presenting an ulcerated carcinoma of the lung. The bronchus leading into the tumor is dilated and contains pus. It shows bronchiectasis and suppuration. This is not frequent nevertheless, its occurrence indicates that this tumor could not have developed very rapidly because bronchiectasis can only develop by gradual closure of a bronchus. The lung tissue adjacent to the bronchiectasis is infiltrated by pneumonia. This pneumonic feature is illustrated better in the next specimen in which you see an ulcerating carcinoma of the right upper lobe bronchus. On cross section the right lung shows some nodular carcinomatous infiltration but the greater part of the lung reveals bronchiectasis and extensive pneumonic infiltration with focal suppuration. In such cases the severe inflammatory process dominates in the clinical picture.

One form of carcinoma in particular, the large sized peripheral carcinoma, is sometimes confusing if it undergoes degeneration, inflammation and final liquefaction. The next slide shows the early stage of a suppurating carcinoma. You see the carcinoma at the periphery while the center begins to become liquefied, with cavity formation. In the next specimen the cavity is more advanced. On direct inspection one can still readily recognize the carcinoma, but I wonder if the diagnosis would have been made so easily on roentgen examination. In such cases one sees a fluid level and since the periphery of a putrid abscess showed pulmonary induration due to chronic pneumonia, such liquefied carcinomata may be mistaken for an abscess. I have seen two such cases in which even at autopsy the diagnosis was exceedingly

difficult and could be made only by histological examination of the rim around the cavity. It might be mentioned here that aspiration of such a tumor may reveal carcinoma cells.

A not so frequent termination of carcinoma of the lung is the massive hemorrhage which may be caused by the erosion of a large artery. You see in the next picture the lumen of the bronchus and of the trachea filled with blood clot which originated in a large hematoma; you can recognize the large bronchus leading into this hematoma. A close-up picture of the specimen shows the situation much better. The carcinoma destroyed the bronchus and eroded a branch of the pulmonary artery. Such a situation is seen far more frequently in tuberculosis and sometimes in bronchiectasis.

Invasion of the mediastinum is quite common in carcinoma of the bronchus, either directly or secondary via lymph node metastases. Carcinomatous invasion of the mediastinum may lead to infiltration of the vena cava, as seen by this bulge into the lumen. This leads to obstruction of the blood flow from the upper part of the body. It should also be mentioned that carcinoma of the bronchus because of its vicinity to the pulmonary veins and arteries quite frequently involves the pericardium and the myocardium, particularly of the auricles. Many of the cases that showed at autopsy invasion of the pericardium had symptoms of angina pectoris. But the cases in which the superior vena cava is invaded are more characterized by the enormous congestion of the face. If carcinoma encroaches upon the pericardium it is frequently associated with pericarditis of hemorrhagic character.

Some carcinomata of the bronchi have a great tendency to invade the pleura. In the next specimen you see the invasion extending on to the pleura of the diaphragm. On cross section you see a thick mantle of carcinomatous pleura. Some suppuration has occurred in one area and a localized empyema has formed. You can realize that an aspirating needle might penetrate only into this area and a wrong diagnosis will be rendered because of the presence of polymorphonuclear leucocytes. However, carcinomata implicating the pleura are generally diagnosed quite easily by cytologic examination of the pleural fluid.

Some carcinomata of the lung produce unusual symptoms because of their particular topographic situation. For instance, in the next slide you see a carcinoma in the apex of the upper lobe of the right lung, which invades the adjacent structure of the pleura. Pancoast has first observed such tumors and because of peculiar symptoms, particularly Horner's syndrome, he believed that these tumors belonged to a special group of what he called superior sulcus tumors. He entertained the idea that such neoplasms originate in embryonal rests in this region. We know today that tumors with such symptoms do not originate in special tissue structures adjacent to the lung; most of them are tumors of the lung. The peculiar symptomatology is determined only by the topographic relation, not by the type of tumor. Therefore, a tumor originating in the upper part of the thoracic portion of the sympathetic nerve, for instance, a ganglioneuroma, may produce identical symptoms.

Metastases

The extensiveness of metastases in carcinoma of the bronchi is well known. I present here one case in which metastatic cervical lymph nodes became adherent to the skin, and the skin was infiltrated. It is well known that carcinomata of the bronchi spread to the upper cervical chain; we see quite frequently biopsies from such lymph nodes. In the axilla there might also be lymph node metastases. It is not always easy to identify the type of carcinoma from the histological picture, but in view of the frequency of carcinoma of the lung we are justified in suspecting an origin in the lung in a lymph node metastasis in these regions in which we find an immature squamous cell carcinoma. One is aware that sometimes very small tumors of the bronchi produce widespread metastases. In the case here presented there were metastases within the galea aponeurotica; there were multiple metastases to the skeleton and also brain metastases. Such deposits are very frequent; in fact, every neurosurgeon knows that he has to rule out a metastatic bronchial carcinoma before he operates on a brain tumor, yet it might often be difficult to diagnose a small bronchial tumor upon x-ray examination, and bronchoscopic examination is not reliable in cases in which the carcinoma is peripherally situated. This case showed also most extensive bilateral metastases to the adrenal glands.

Carcinomata of the lung may produce metastases in unusual sites, for instance, in the spleen or in the kidney. This is accounted for by the fact that the carcinoma of the bronchus, because of its proximity to the large pulmonary veins, may disseminate by way of the blood stream and not only through the lymphatics.

The frequent metastases within the skeleton can be recognized on the autopsy table much better than on x-ray examination. We noticed some years ago that vertebrae which were very heavily involved were negative on x-ray examination. The carcinoma in such cases was localized only within the bone marrow and did not affect the bony trabeculae. Therefore, it could not be visualized by x-ray examination. In recent years, since we have become aware of this fact we perform bone marrow aspirations and find tumor cells in cases in which roentgen examination did not reveal the presence of skeletal metastases. Because of the occurrence of very large metastatic deposits originating from very small bronchial carcinomata, metastatic tumors can be confused with a primary neoplasm.

So far I have discussed only the experiences which are derived from post mortem findings. Fortunately we have now a number of cases which indicate that carcinoma of the lung is not necessarily a fatal disease if recognized early. I show you here one case which was particularly interesting because we have a complete follow-up. The resected lung was, as you see, heavily involved by a peripheral tumor of bronchial origin. Not only was the lung invaded but the adjacent rib also showed infiltration. The thoracic surgeons are today very radical and do not hesitate to remove portions of the chest wall if they are involved. This case certainly justified such a radical attitude because the patient remained perfectly well for four years. He died of coronary thrombosis. At autopsy we did not find any evidence of carcinoma. This shows that the outlook today is not as grim as it used to be in former years when the diagnosis of carcinoma of the bronchus was equivalent to a sentence of death.

Parenchymal Carcinoma: Adenomatosis?

I repeat that the overwhelming majority of the malignant tumors of the lung are carcinomata originating in the bronchial epithelium. But there are cases in which one cannot recognize an origin from a bronchus; in fact, one has to conclude that these tumors do not originate from the bronchi. In the next picture both

lungs appear rather voluminous. One first thinks of pneumonic infiltration. The cut surface shows many areas which seem to be infiltrated by pneumonia. There are confluent patches, slightly raised on the surface and granular. These are tumors of multicentric origin, originating in the lung parenchyma, which show a histology different from that of the bronchial carcinoma. They are papillary carcinomata which resemble the peculiar lung tumors of sheep observed in the Union of South Africa. They have been called diffuse adenomatosis of the lung, or *jaagsiekte*. The sheep disease is supposed to be caused by a virus. We observed one case in the human in which virus studies were made, but they were negative. We do not know yet whether the human tumor is actually related to the sheep adenomatosis. If this type of neoplasia is multicentric, as we see it at the autopsy table, the diagnosis is not so difficult. Occasionally, however, we observe such tumors which seem to be isolated, particularly in our surgical material. Some years ago I observed such a tumor which had been resected. It showed the characteristic histology. The patient died postoperatively, and we could perform an autopsy. Because we knew about the multicentricity of this type we searched very carefully for evidence of tumor in the other lung; we found one small area of exactly the same histological structure, indicating the multicentricity in this case which was apparently isolated. It is interesting that these tumors, in spite of the widespread involvement of the lungs, rarely metastasize. If there are metastases only a few of the regional lymph nodes are affected, but there are no distant metastases as in bronchial carcinoma.

Fibrosarcoma

Other types of malignant tumors of the lung are rare compared with carcinoma. Occasionally we encounter fibrosarcoma of the lung, as in this picture. It showed nodular infiltration of the lung. It is interesting that in 2 cases of sarcoma I observed, the tumor protruded into the bronchus. You see here a polypoid mass bulging into the lumen. The diagnosis in this case was made on the biopsy from the bronchoscopic examination.

Chondroma

A tumor of the lung which is frequently seen at autopsy is the chondroma of the lung. As a rule the chondromata are small, not larger than a hazelnut. In this picture a large tumor, more than plum-sized and sharply circumscribed, can be seen. These are perfectly harmless tumors. In fact, it is a question whether they are actual neoplasms or merely aberrations in the development of the lung in which parts of bronchial anlage become misplaced and subsequently proliferate. We speak of such tumor-like malformations as hamartomata. It is obvious that if such a mass is accidentally discovered on roentgen examination the physician in charge would be inclined to have it removed, or at least explored. If one knows of the existence of such nodules from autopsy experience, one might think of the possible diagnosis, especially if one is familiar with their sharp demarcation. Sometimes such chondromata may cause symptoms. In the next picture you see a case in which a lobectomy was performed because a chondroma bulged into the lumen of the large bronchus causing stenosis with subsequent bronchiectasis. As a rule, however, these chondromata are situated within the lung parenchyma and implicate only very small bronchi because of their peripheral location.

Adenoma

I proceed now with the next important topic of tumors of the lung, namely the adenoma of the bronchus. Our experience regarding adenoma of the bronchus bears out the fact that pulmonary neoplasms have become much more frequent in the past 25 years. After I had seen the first bronchial adenoma at autopsy we carefully surveyed the literature. In 1927 only 26 cases of benign tumors of the bronchi had been reported in the world literature. The majority were of epithelial type, although there were a few fibromata. Certainly in the last 20 years there have been reported many more cases and I think at least an equal number have been noticed by bronchoscopists but not recorded. The adenoma is certainly not an unusual tumor. It is equally distributed between the sexes. It occurs in all stages of life, and we have seen it in 2 young boys, one 14 and other one 16 years. Generally, the age incidence is lower than in carcinoma. The period of early adulthood is particularly frequently affected. As you know, repeated small hemorrhages are one of the main symptoms. Just as in carcinoma one has to distinguish the location within the main and the more peripheral bronchi. This distinction has definite practical importance in reference to the therapeutic management. The characteristic feature of the adenoma is a perfectly smooth surface as you recognize it in this picture. The bronchial adenomas protrude into the bronchial lumen, but they bulge also on the outside and expand into the adjacent lung tissue. This fact is important. In the next slide you see that the lung tissue adjacent to the bronchus seems to be invaded by a tumor which protrudes into the lumen; but this is an expansive growth, as you will recognize shortly. Again you recognize the perfectly smooth surface. This contrasts very distinctly with the polypoid tumor you see in the next picture. Compare the smooth surface of the adenoma with the ragged surface of the polypoid carcinoma. In the next picture we see again an adenoma of the lung in which the original intrabronchial tumor cannot be well recognized because the patient had received endobronchoscopic treatment over a long period. We see, however, a tumor mass outside of the bronchus. It is sharply circumscribed, and could almost be shelled out. The adenomata of the bronchi, even if they expand into the adjacent tissue, are sharply demarcated. In the next picture you see a lymph node adjacent to the bronchus which seems to be invaded. But again you will see on close examination that this involvement is not of the typical metastatic type but is a result of an expansion of the tumor from the bronchus into the adjacent lymph node. This is a significant observation because in the last years the opinion has been expressed that the adenoma of the bronchus should not be considered a benign tumor. On the next picture you see the bronchus opened; you still see tumor bulging into the lumen but more of it is outside. It resembles a collar button.

The evolution of the adenomata of the bronchus might be demonstrated in 2 specimens. The first is a polypoid adenoma which was found on autopsy in an elderly woman who was suffering from respiratory distress for many years. She was admitted to Mt. Sinai Hospital because of an empyema and had a thoracotomy. She was very much improved and ready to be discharged when she suddenly died of a profuse hemorrhage. At autopsy a pedunculated polyp was dicovered hanging into one of the main bronchi of the left lower lobe. The origin of the hemorrhage was found in a rupture of an

aneurysmatic dilatation of the branch of the pulmonary artery situated within the wall of a bronchiectatic cavity distal to the polyp. This type presents the pedunculated endobronchial tumor. The histological examination disclosed that the tumor originated in the submucosal glands of the bronchus but did not progress into the outer layers.

In contrast to this feature note in the next picture the endo- and exo-bronchial development of a bronchial adenoma. It is my belief that the bronchial adenoma originates not from the surface epithelium but from the epithelium of the submucous glands or their ducts. This origin explains the observation that tumors of the bronchus may expand extramurally. It is obvious that the natural history of such tumors and consequently their treatment must be different from those which grow only endobronchially. I have taken some data from an article of Dr. Max Som. He reviewed 50 cases of bronchial adenoma which had been observed by the Laryngologic Service at Mt. Sinai Hospital. 15 of these were treated endobronchoscopically with good results. He emphasizes the fact that adenomata located in one of the main bronchi can be successfully treated by resection, electrocoagulation and finally diathermy, paying attention to treating the base of the tumor. In these 15 cases he had good results in 12; 3 cases however had to be operated with lobe resection because the tumor recurred persistently. It is obvious that adenomata which expand on the outside of the bronchus cannot be coped with by conservative endobronchoscopic resection. In such cases lobectomy and even pneumonectomy has to be done. The question whether adenomata of the bronchi may become malignant will be discussed when I present the histological features.

Metastatic Neoplasms

Before that I should like to show some pictures illustrating secondary metastatic tumors of the lung which are very frequent. In fact, the lung is one of the most frequent sites of metastatic deposits from primary carcinomata of the body. The first picture is that of a carcinoma of the breast metastasizing to the pleura and the lung. The next picture shows an interesting case of a malignant teratoma of the testis. The large metastasis surrounded one of the bronchi, breaking into its lumen and producing an endobronchial neoplasm.

It may happen that a bronchoscopic biopsy is removed from such a metastatic tumor, and that a histological diagnosis can be made indicating the primary tumor. This is shown in the next picture. A hypernephroma of the kidney had been removed several years before. It nevertheless metastasized to the lung and invaded a bronchus, causing the symptoms of a bronchial carcinoma. A polypoid tumor was seen on bronchoscopy. The biopsy revealed the typical histology of hypernephroma. The next picture shows most diffuse metastatic nodules in the lungs and in the pericardium. Some of the nodules are grayish. This is a metastatic melanocarcinoma which is known to produce most extensive metastatic deposits. The next picture shows metastatic osteogenic sarcoma. You know that bone sarcoma has a singular tendency to metastasize to the lung. Similar multiple pulmonary metastases were present in this case of a primary Wilm's tumor of the kidney. I present now histological pictures which illustrate the spread of gastric carcinoma to the lung. You see tumor cells within the lymphatics surrounding small arteries which are obliterated. This is a type of rather rare lymphatic carcinosis.

Histology

Very briefly I shall demonstrate the histology of primary carcinoma of the bronchus. Here we have a very mature squamous cell carcinoma with pearl formation and here a mature epidermoid carcinoma without hornification. The next slide shows a squamous cell carcinoma with great cell irregularity and lesser maturation. The next picture shows an adenocarcinoma. You must recall that the carcinoma of the bronchus originates from the lining epithelial cells. The bronchial epithelium takes its origin from the entoderm and the cells retain the potentialities of the ancestral cells. We therefore can understand that the carcinomatous cells may either retain their normal pattern of cylindrical form and even form glands, or they may differentiate by metaplasia into squamous cells. It is not surprising to find quite frequently combination of adenocarcinoma and squamous cell carcinoma in one and the same bronchial neoplasm. The next picture shows the small cell carcinoma with very dark nuclei. They resemble and are occasionally confused with the cells of lymphosarcoma. This is a most immature and atypical carcinoma of the bronchus.

There is a tendency on the part of clinicians to demand grading of tumors according to the type of tumor cells. It is not difficult to grade tumors and you can see that the most mature squamous cell carcinoma with pearl formation differs obviously from the small cell carcinoma. I do not believe however, that we gain very much information from tumor grading as to the prognosis in the individual case. Instances of small cell carcinoma may spread just as rapidly and widely as squamous cell carcinoma even of the mature type. I believe that the histological feature reflects one factor in the biology of carcinoma, but I do not believe that it is of paramount importance in the natural history of neoplasia.

The next slide shows the typical appearance of adenoma of the bronchus. As a rule the histological diagnosis is not difficult. One has to know, however, that there are certain types of bronchial tumors which grossly resemble very much the adenoma. Histologically, however, they are mixed tumors like those commonly observed in the salivary glands. These mixed tumors show frequently the formation of cylindromatous areas and should not be identified with the benign adenoma and rather diagnosed as adenoma carcinomatodes cysticum. These neoplasms have a different prognosis. Therefore, if the biopsy of an apparent bronchial adenoma shows this histologic picture lobectomy or pneumonectomy is indicated. One must not temporize with this type of tumor. Now as regards the question of malignant transformation of adenomata, it is true that some adenomata may grow to such tremendous sizes that they impress one as a carcinoma. Histologically, however, they show the same picture as the small tumors. As regards the question of metastases of such large tumors, I have only one case in which the tumor resembled a typical adenoma. Lobectomy was performed, and the diagnosis was confirmed by another pathologist. The patient died several years later and showed extensive liver metastases of a histologic pattern identical with the primary tumor.

Medical News

The first English reports on Antabuse (Tetraethylthiuramdisulphide) (*Lancet* 225:1001 and 1004, Dec. 25, 1948) are quite rosy. This drug produces a physical aversion to alcohol and is said to be non-toxic in the recommended dosage of 1.0 gm. the first day, with gradual reduction to .1 gm. per day for maintenance. Since the effect of a one gram dose lasts about six days, it is possible to keep an ex-alcoholic sober on one dose a week. It works by increasing the amount of acetaldehyde which is formed in the body after ingestion of alcohol. The rapid rise in blood acetaldehyde half an hour after a drink of alcohol causes intense facial flushing, palpitation and increased ventilation, with a feeling of dyspnea and great uneasiness. If the patient (victim ?) persists in drinking alcohol, headache, nausea and vomiting will occur. These phenomena are so unpleasant that the patient cannot be persuaded to drink a second time. The only remaining problem is to get alcholics to take Antabuse.

Hiccup can be regarded as an extrasystole of the diaphragm. That may explain why quinidine has been found to be extremely effective in controlling stubborn hiccup. (Bellet and Nadler, *Am. J. Med. Sci.*, 216:680, Dec., 1948). The recommended dose is 6 grains or more orally as often as needed. One patient with intractable hiccup due to mediastinal tuberculosis was given 9 grains of quinidine intramuscularly every hour for two weeks! With such treatment the patient probably didn't dare hiccup.

P.B.Z. turns out to be a powerful topical anesthetic. Complete anesthesia of the oral mucosa appears 60 seconds after gargling with a 1 per cent solution, and lasts about 30 minutes. Used as a mouthwash, P.B.Z. solution allows patients with aphthous stomatitis and other painful mouth lesions to eat normally. A 2 per cent ointment relieves painful hemorrhoids and P.B.Z. powder stuffed into a carious tooth abolishes toothache. (Moseley, V., *Am. J. Dig. Dis.* 12:410, Dec., 1948).

Tween 80 (polyoxyethylene sorbitan monooleate) a non-toxic emulsifying agent, seems to develop a new use each month. Originally incorporated as a wetting agent in various lotions used in dermatologic practice, it was next adapted to the production of a liquid medium which grows tubercle bacilli in one week, a tremendous increase in speed over the Petragnani and other older media. The newest wrinkle in these media is the addition of serum albumin which binds the traces of unesterified oleic acid present in commercial Tween 80. This permits very small inocula to give positive results.

Tween 80 is now advocated for oral use in patients who have difficulty absorbing fat (sprue, chronic pancreatitis, post-gastrectomy). In such patients the oral administration of 1.5 gm. of Tween 80 with each meal has resulted in a sharp decrease in the amount of fat lost in the stool, and a pronounced gain in weight. (Jones, C. M., et al., *Ann. Int. Med.*, 29:1, July, 1948).

Thalamyd (phthalyl sulfacetamide) a new unabsorbable sulfonamide, has a unique advantage over its cousins sulfa-suxidine, -guanidine and -thalidine. Like the others Thalamyd given orally produces a blood level of zero, but unlike them it appears in high concentrations *within* the wall of the intestine. Quantitative analysis done separately on the mucosa, muscularis, and serosa of animals given this sulfonamide, showed bactericidal concentrations of the drug in each layer of the large and small intestine. Used preoperatively, Thalamyd provides not only a sterile lumen, but perhaps more importantly, a sterile gut wall. It destroys a remarkable variety of enteric bacteria. Shigella organisms are highly sensitive to it, and the cholera vibrio disappears from the stools of carriers, and of patients with acute cholera. A high degree of usefulness is predicted for this drug in the treatment of chronic ulcerative colitis. Complete clinical and radiological recovery was recently reported in 18 of 28 such patients given Thalamyd (Heineken, T. S., and Seneca, H., *Rev. Gastroenterol.*, 15:611, Aug., 1948).

Priscol (benzazoline HCl), similar to Etamon (tetraethylammonium chloride) in its actions, has the advantage of being effective orally. It acts by blocking sympathetic nerve-endings in smooth muscle, and by a direct histamine-like effect on small vessels. Its chief usefulness is in peripheral vascular disease, where by prolonged vasodilating action it relieves pain and promotes healing of trophic ulcers. In Buerger's disease, Raynaud's disease, thrombophlebitis, and vascular sclerosis in diabetics and aged patients the maintenance dose is 25-50 mg. every 3-6 hours. Its histaminic action permits it to be substituted for histamine in testing gastric acid secretion. Its usefulness in essential hypertension has not yet been clinically determined.

Tolserol, used in Europe for several years as "Myanesin," is now available in this country. Given intravenously as a 2 per cent solution or orally in 0.25 gm. tablets, it relieves spasm of skeletal muscles. The dose is 1 gm. 3 to 5 times daily. It has been found useful in tetanus, Parkinsonism, cerebral diplegia, ordinary hemiplegia, multiple sclerosis, amyotrophic lateral sclerosis, and other painfully spastic conditions (cervical disc, cervical rheumatoid arthritis, shoulder-hand syndrome, "acute low back"). Tolserol has a curare-like action, but the site of its action is the cord and brain stem, rather than the myoneural junction. It has a much greater margin of safety than curare, but very large doses can produce respiratory paralysis, hemoglobinuria and fatal sino-auricular block.

Patients with hemiplegia of 4 to 7 years duration had striking recovery of voluntary movements 20 minutes after Tolserol was given. It also relieves thalamic pain, a distressing post-cerebral-thrombosis complication which has heretofore not yielded to anything short of opiates. In Parkinsonism Tolserol works best when given along with atropine compounds rather than as the sole medication. It should be very useful in acute poliomyelitis.

C. A. Domzalski, Jr., M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 279th regular meeting of the Hawaii County Medical Society was held at The Lanai in Hilo on December 3, 1948. The business meeting was called to order at 8:35 P.M. by the President, Dr. L. R. Fernandez. Members present: Drs. W. N. Bergin, L. Bernstein, C. L. Carter, M. L. Chang, W. T. Chock, H. E. Crawford, D. S. Depp, B. M. Eveleth, L. R. Fernandez, C. Hayashi, J. T. Jenkin, S. Kasamoto, W. Loo, J. Matsumura, R. M. Miyamoto, S. Mizuire, H. Okada, A. Orenstein, C. L. Phillips, H. M. Sexton, L. L. Sexton, W. J. Seymour, E. F. Slaten, F. Wong, T. D. Woo, K. Yoshimura, H. B. Yuen, and R. Yamanoha. Guest present: Dr. H. E. Bowles, Honolulu.

Dr. H. M. Sexton presented the report of the Public Policy and Grievance Committee recommending a uniform fee schedule for all contractual work be established on a territorial level and recommending support of the County Slaughterhouse and Meat Inspection Ordinance. On motion of Dr. T. D. Woo, seconded by Dr. C. Phillips, the report was unanimously accepted and the Committee requested to obtain further information from the Honolulu County Medical Society regarding their support of fee schedules on a county level.

Dr. H. E. Bowles spoke on "Obstetrical Emergencies" and "Saddle Block Anaesthesia."

* * *

The 280th regular meeting of the Hawaii County Medical Society was held at the Hilo Hotel on January 13, 1949. Dinner was served at 6:30 p.m. The business meeting was called to order at 7:45 p.m. by the President, Dr. L. R. Fernandez. Members present: Drs. Bergin, Bernstein, S. R. Brown, Carter, Crawford, Depp, Eveleth, Fernandez, Haraguchi, Hata, Hayashi, Kasamoto, Kutsunai, Miyamoto, Mizuire, Oto, C. L. Phillips, H. M. Sexton, Seymour and Woo. Guests present: Dr. Joseph Palma, Dr. John H. Schaefer.

Dr. Joseph Palma, President of the Hawaii Territorial Medical Association, addressed the Society on "Pressing Problems Facing the Medical Profession Today."

LEO BERNSTEIN, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

A regular meeting was held on Friday, January 7, 1949, at 7:30 P.M., in the Mabel Smyth Building. Dr. Gotshalk presided; there were 142 physicians, dentists and other guests present.

Dr. Kepner introduced Dr. Frederick Lemere of Seattle, Washington, who spoke on the treatment of alcoholism. His paper was discussed by Dr. Kepner.

Dr. Fujiwara introduced Dr. Ryojun Kinoshita, president of the Japanese Cancer Society and of Osaka University, who spoke about the research in which he has been interested.

Miss Stella King, Deputy Collector of Internal Revenue, discussed allowable tax deductions and answered questions concerning income tax.

Dr. F. J. Pinkerton presented the delegate's report on the Interim Session of the A.M.A. held in November in St. Louis.

The chairman declared a recess after which the Society met in a closed session. The chairman requested Dr. Samuel Yee, Secretary of the Society, to read the resolution, which had been rejected by the Board of Governors and circulated to all members of the Society, proposing that the Territorial public relations program be given up and that our support be directed to the national program.

After a long discussion, the motion was voted on by secret ballot. There were 45 ballots cast in favor of the resolution and 54 opposed to it. The chairman announced the defeat of the motion and adjourned the meeting.

* * *

The regular meeting of the Honolulu County Medical Society was held on February 4, 1949 in the Mabel Smyth Building. Dr. Gotshalk presided and there were 61 members and guests present.

A movie on oral surgery by Dr. Wilson, photographed by Dr. Halpern, was presented.

Two papers on vascular surgery were read. The first, by Dr. C. M. Burgess, was entitled "Removal of Saddle Embolus of Aorta." This paper was discussed by Dr. Wiig, Dr. Hartwell and Dr. Lester Yee. A second paper by Dr. Shoyei Yamauchi was entitled "Surgical Treatment of Tetralogy of Fallot." This paper was discussed by Dr. Hill and Dr. Hartwell.

Refreshments were served on the lanai following the meeting.

SAMUEL L. YEE, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The regular January meeting of the Maui County Medical Society was held at the Grand Hotel on January 18, 1949 at 7:30 p.m. with Dr. Kanda presiding. Dr. Kanda had the members of the society as his guests at his home at an informal cocktail party from 5:30 p.m. to 7:00 p.m. Members present: Drs. Sanders, St. Sure, Cole, Izumi, Kanda, Underwood, Fleming, Kashiwa, Wong, Jim, H. Kushi, E. Kushi, Tompkins, Burden, Rockett, Toney and Shimokawa. Guests: Drs. Ferkany and Faillo, D.D.S. & M.D.S.

It was voted unanimously that the Maui County Medical Society set a minimum fee of $10.00 for all insurance examinations on adults and a minimum fee of $5.00 for all insurance examinations on children, for members of the society. It was felt that in a question such as this the entire membership should be polled and their signed agreement be kept on file in the society records. The secretary was instructed to write each member and obtain a written statement from him or her stating that he or she agreed to abide by these fees.

E. B. UNDERWOOD, M.D.
Secretary

PSYCHIATRIC COMMENT

INFORMATION FOR GENERAL PRACTITIONERS IN REGARD TO SPECIAL PSYCHIATRIC METHODS

This paper was written for the purpose of answering certain questions which general practitioners have frequently asked of the author. They have been particularly interested in the types of specialized psychiatric treatment indicated for various of their patients so that they might themselves understand what the psychiatrist would probably do for the patients, and also be better able to interpret the same to the patients' families.

There will be presented, then, indications for and applications of psychiatric methods available to the specialist. These include deeper and more intensive psychotherapy, individual or group; shock therapy—insulin, metrazol, electric; hypnosis and narcoanalysis with sodium pentothal or sodium amytal; psychoanalysis; prefrontal lobotomy, etc.

Treatment and expectation of success in the hands of the specialist varies. However, the following points may be of interest. Of the psychoneuroses, many anxiety states respond well to psychotherapy following deep exploration of the causes, and treatment of the individual and environment. Conversion hysteria in cooperative individuals may respond well. Psychasthenia, with obsessions and compulsions and phobias, is exceedingly difficult to manage without the longer and more involved psychoanalytic approach, though superficial therapy may be helpful. Hypochondriasis, with over-concern about bodily organs, frequently responds well to education, persuasion, and encouragement. Pentothal interviews are of great value in all of these conditions. Shock treatment is to be used with caution in these neurotic patients; electric shock, particularly, because of its tendency to produce amnesia, may prolong the patient's anxiety. Metrazol may occasionally be helpful in those neurotics with depressions, deep-seated guilt and paranoid feelings. Lobotomy is to be recommended only after other methods have failed, and when psychiatric and psychological examinations have shown the case to be suitable for the procedure; it is said to be helpful in the obsessive-compulsive states. Probably 60 per cent of the psychoneuroses are improved by proper application of the above methods.

Manic-depressives usually recover from their attacks, with, however, a tendency to recurrence. Psychotherapy is not of so much help during the acute attack, as it is later when the patient improves and becomes more accessible. Electric shock and metrazol are helpful in the manic or excited phase, although treatments may have to be given more frequently, and supplemented with hydrotherapy, sedation, etc. The depressive phases respond rather rapidly to either type of shock. Involutional depressions respond in a large percentage of cases to shock therapy; the involutional paranoid, which is more akin to the schizophrenic, in fewer cases. Lobotomy is to be recommended in these cases only after other methods have failed. The reactive depression, which is closely akin to the manic-depressive depressions, has been benefited by treatment of the environment and by shock.

Schizophrenics respond in some instances to electric shock, notably the catatonic stupors. These respond remarkably to either electric shock or metrazol, with, however, numerous relapses. The prognosis is not so good with shock in the paranoid types, for which some authorities recommend the use of long courses of deep insulin treatments. Electric shock and metrazol,[1] however, are certainly worth a trial. Deep insulin treatments are recommended in early cases of catatonic excitement and paranoid schizophrenia, which have not responded to other procedures. The simple and hebephrenic praecox respond poorly to any of these therapies.

A few added comments in regard to the special modes of treatment may be helpful. Sodium pentothal and amytal interviews are not ordinarily cures for mental disorders. They are very helpful in exploring for repressed causes in the psychoneuroses and in some instances in implanting deep therapeutic suggestions as well. However, they are merely shortcuts in getting material which is either consciously withheld or is repressed, and cannot substitute for longer-term psychotherapy. While it is comparatively easy to remove symptoms, e. g., in hysterical hemiplegia, it is necessary

This is the remainder of a paper which was read before the 56th Annual Meeting of the Hawaii Territorial Medical Association at Honolulu, May 4, 1946. A part has been previously published in the HAWAII MEDICAL JOURNAL, November-December, 1946, Vol. 6, pp. 109-112, under the title "Psychiatry for the General Practitioner."

[1] Burlingame, C. C.: Editorial and Other Comment, Digest of Neurology and Psychiatry, Series XIII, Hartford, The Institute of Living, (Sept.) 1945.

to treat further the personality and the situational factors involved lest the symptoms recur. In the psychoses, pentothal may be very valuable for exploration of the underlying causes, but should not ordinarily be used as a therapeutic means. Material thus obtained may or may not be discussed later with the patient, depending upon the emotional perturbation it may cause him, and on other factors.

The long-term Freudian psychoanalysis is to be reserved for a selected few psychoneuroses and must be carried out by one well-versed therein.

Lobotomy is an operation severing the bundles between the prefrontal lobes and the thalamus, thereby reducing the emotional response in the thalamus to ideas in the cortex. It is a permanent procedure, not to be entered into lightly nor until other methods have failed. The operation is performed for groups of symptoms, rather than for any fixed diagnosis. The individual, according to Freeman,[2] who is ideally suited for prefrontal lobotomy is one whose emotions are largely concerned with himself. The duration of the illness is of less importance in deciding whether to operate than the degree of break with reality, other things being equal. Obsessions and compulsions which have existed for decades stand a better chance of benefit than complete withdrawal and hallucinations existing for as many months. Also, in older persons, there are better possibilities for readjustment than in young persons, perhaps because the older person has adjusted satisfactorily to the world, whereas the young person has started this peculiar behavior with adolescence or before. Although some patients still retain their delusions and hallucinations after lobotomy, they are unconcerned about them and do not respond actively to them. Because of this "emotional bleaching," many paranoid schizophrenics with a great deal of emotional charge and impulsiveness and belligerence should be considered for lobotomy, if other methods have failed. Before deciding on a lobotomy, it is well to have careful psychological examinations, since some criteria which are helpful have been studied by Porteus and the author,[3] with further work thereon by Peters at the Psychological Clinic.[4]

[2] Freeman, W. and Watts, J. W.: Prefrontal Lobotomy, Am. J. Psychiatry 99:800 (May) 1943.

[3] Porteus, S. D. and Kepner, R. D.: Mental Changes after Bilateral Prefrontal Lobotomy, Genetic Psychology Monographs, 1944, 29:3-115.

[4] Peters, Henry N.: Maze Test Validation and Psychosurgery, Genetic Psychology Monographs, 1947, 36:3-86.

The treatment of psychoses with convulsive disorders is ordinarily the treatment of the convulsions, plus psychotherapy and other indicated methods. The seizures must be studied carefully to determine their origin and to remove any precipitating factors such as syphilis, brain tumors, depressed skull fragments, etc. The treatment consists of the use of dilantin, phenobarbital, mebaral, tridion, ketogenic diets, glutamic acid, etc.

Mental disorders due to other organic or toxic processes in the brain or elsewhere are ordinarily best treated by therapy directed at the underlying condition. One must be cautious in such cases about giving too much sedative, and careful to keep up food and fluid intake. Central nervous system syphilis is ordinarily treated by the general practitioner or dermatologist and requires no comment, except to say that chemotherapy plus fever in paresis is practically a must. Penicillin is a recent and valuable addition to our armamentarium. Shock therapy has been helpful in some cases of psychosis with central nervous system syphilis. The prognosis is grave in paresis, better in some other forms.

Drug addictions should be treated in an institution where the patient does not have access to the drugs, and preferably by immediate withdrawal with substitution therapy, dolophine, barbiturates, insulin, perhaps demerol for withdrawal pains, short psychotherapy, re-education, etc. The prognosis is guarded. Alcoholics can be treated by adequate diet, perhaps additional thiamin, nicotinic acid, spinal puncture, hydrotherapy, psychotherapy, and later exploration of the basic underlying personality difficulties and anxieties, the use of Alcoholics Anonymous, and the so-called conditioned aversion reflex therapy.

Summary

There have been discussed briefly specialized methods of psychiatric treatment.

It is hoped that this paper will answer questions frequently asked by referring general practitioners, and assist them in interpreting probable treatment and prognosis to patients and relatives.

Richard De Monbrun Kepner, M.D.

BOOK REVIEWS

Psychiatry in General Practice. By Melvin W. Thorner, M.D., D.Sc. 659 pp. Price $8.00. W. B. Saunders Company, Philadelphia and London, 1948.

This very readable volume deserves a place in the library of every general practitioner, particularly since it can serve as a constant stimulus to the opinion that at least eighty per cent of the general practitioner's work is psychiatric in nature. It reflects a beautiful effort on the part of Dr. Thorner to simplify and make readable a branch of the medical sciences that has almost become submerged by its ponderous vocabulary. The book, although a factual text, reads almost like a novel and each chapter is beautifully summarized in a very few words. An excellent cross section of typical psychiatric case histories is presented, scattered throughout the chapters of didactic material. Dr. Thorner has done an excellent job of bringing back to earth one of the more interesting branches of the *art* of medicine.

A. V. Majoska, M.D.

Cancer of the Esophagus and Gastric Cardia. Edited by George T. Pack, B.S., M.D. 1949. 192 pp. Price $5.00.

This small volume is essentially a reprint of an issue of the journal, *Surgery,* in which the articles first appeared as a symposium on surgery of the esophagus and gastric cardia, at the request of its editor, Dr. Owen Wangensteen.

In addition to the author, Dr. George T. Pack, who has done much in this field, the articles are contributed by such outstanding men as Garlock, of New York; Clagett, of the Mayo Clinic; Maier, of New York; Amesti, of Santiago, Chile; Ochsner and DeBakey, of New Orleans; and Sweet, of Boston. These surgeons cover the field of cancer in this region from all points of view and in a very readable, informative style.

The illustrations are splendid, especially those depicting operative technique by stages of the operation.

This book should be consulted by all those who contemplate surgery in this part of the body. It should also be read by physicians in general for a better understanding of surgery in this area, along with the diagnosis of the lesions demanding surgery. The book gives one a ray of hope, both for palliation and for cure, for a disease which until ten years ago was indeed a sad one with no hope for the sufferer.

Laurence M. Wiig, M.D.

Adolescence Problems, A Handbook for Physicians, Parents, and Teachers. By William S. Sadler. 1948. 466 pp. Price $4.75.

This is a valuable book for any adult who has to deal with teen-age problems. Dr. Sadler discusses the various aspects of this transition between childhood and adulthood not only from his many years as a psychiatrist but also from the concensus of the up-to-date opinion of other recognized authorities in this field. He gives a clear picture of the problems to be met, of the psychodynamics involved and of how these problems can be approached. Dr. Sadler does not profess to follow any school. His healthy approach is dynamic or developmental, such as has been instigated and fostered by the great men of recent psychiatry. Some psychoanalytic principles are used but the reader is not scared off by deep psychoanalytical concepts and nomenclature. The reader will often find that he is thinking in terms of himself, and it is likely that this is the main purpose of this book. For, as Dr. Sadler sees it, many of the problems young people bring for solution have turned out to be problem teachers, problem parents, and problem homes.

Technically, the book is well written and readable, and the division into parts, chapters, sections and subsections is good, but there seems to be too much italicization of words and phrases for emphasis—the smooth flow of thought is brought up short too often by this.

Y. T. Wong, M.D.

Health Education. Edited by Charles C. Wilson, M.D., 4th Edition, completely rewritten. 1948. 413 pp. Price $3.00.

It was a privilege to review this well assembled and edited book. It represents the thinking and efforts of twenty-four outstanding leaders in the fields of education and medicine and is one of the best of the recently published health education books in the field of school health. Inclusion of a number of graphs, diagrams and photographs adds to the interest of the book and makes it more useful than the second revision which was published in 1941. Each of the twenty chapters is followed by a list of references for further reading in the specific areas of school health.

One of the valuable aids in the book is a list of publications of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association which will be very helpful for nurses and teachers who are working with school children. Another important feature is a comprehensive list of professional associations and voluntary organizations which are concerned with school health services. Their addresses are also included.

Modern viewpoints on the responsibilities of the doctors, dentists, nurses, teachers and school administrators in regard to their role in the health education of the school children of today, are clearly portrayed. I recommend it highly for professional workers in these categories.

Loretta T. Schuler, P.H.N.

Manual of Clinical Laboratory Methods. By Opal Hepler, Ph.D., M.D. 4th Edition. 1949. Price $8.50. 395 pp., 36 Figs., 8 full color plates, 84 tables.

If the number of tests described was the criterion for judging a clinical laboratory manual, then Dr. Hepler's latest edition would be no match for Gradwohl's massive tome. But the choice of tests discussed would seem to be more important, and in this Dr. Hepler seems to have shown excellent judgment; she has included a great majority of those analyses that are

commonly accepted and used. They are described concisely and in logical order, and it is hard to see how the average technologist could go far wrong if she followed the clear-cut, step-by-step directions.

Under the heading for each test is found a complete list of all necessary equipment and reagents, with directions for preparing the latter. The basic principle of the test, and general considerations are mentioned briefly but sufficiently to give the technician an understanding of what she is doing and why, and the short paragraph having to do with interpreting the results should prove interesting if not helpful. Illustrations are included where needed—for example, in sections dealing with microscopic analyses—and they are, for the most part, extremely good. Five color plates in the hematology section are excellent, showing both normal and abnormal forms of the various types of cells.

Perhaps the page size, 8 by 11 inches, is a little large for easy handling in the laboratory. The type is clear and is set two columns to the page, which makes for easier reading and improves the appearance of the page.

The binding, leatherette, looks as though it could stand plenty of hard usage. It's a book that should be a fine addition to the library of any clinic or laboratory.

JAMES M. BEEBE, PH.D.

Pathology, Edited by W. A. D. Anderson, M.A., M.D., F.A.C.P. 1453 pp. with 1183 illustrations and 10 color plates. Price $15.00. The C. V. Mosby Company, St. Louis, 1948.

Dr. Anderson brings together in one volume the specialized knowledge of 32 pathologists in various phases of general pathology and pathologic anatomy. The manner of presentation is such that the book will serve admirably as a text for medical students. It will perhaps find its widest sphere of usefulness on the shelves of practicing pathologists, and as a reference for physicians in the various clinical branches of medicine.

The volume is much more comprehensive in scope than the usual book dealing with general pathology, since it includes sections on the breast, male and female genitalia, and other organs and structures usually delegated to separate volumes of surgical pathology. Moreover there are excellent sections, although necessarily brief, on the skin, organs of special senses, bones, joints and nervous system. These specialized branches of pathologic anatomy are neglected in most textbooks of general pathology, and as a result the student, interne or resident acquires a limited knowledge of the pathology of these special fields, out of all proportion to their relative importance in medicine.

Each of the 46 sections of the book is annotated with a bibliography which in most instances is extensive. The paper is of good quality and the illustrations are excellent. I have already ordered this book for my own use; many others will do likewise.

I. L. TILDEN, M.D.

Handbook of Orthopaedic Surgery. By Alfred Rives Shands, Jr., B.A., M.D. Third Edition. 574 pp. Price $6.00. The C. V. Mosby Company, St. Louis, 1948.

The author prepared this volume for the general practitioner. It might well have been entitled, "Handbook of Bone and Joint Diagnosis," rather than "Handbook of Orthopaedic Surgery." Characteristic illustrations and well balanced descriptions of the common orthopedic conditions occupy the majority of space in this book. Infections, neuromuscular disabilities, fracture deformities, tumors and congenital deformities receive adequate discussion. As a reference aid, affections of the various joints and regions, such as affections of the knee, spine, hip, shoulder, etc., are arranged together.

Operative technique and detailed non-operative treatment are not included. Those interested in more specific treatment are referred to relevant material by a well chosen bibliography. Pathologic and etiologic content is scanty in comparison to that concerned with diagnosis and the clinical picture. This is particularly evident in the group of congenital deformities and affections of growing bone; however, it is unquestionably the result of insufficient available information rather than neglect on the part of the author. May the future provide more orthopedic fundamentals and less variations of operative technique!

The book, originally published in 1937, is now in its third edition, adequate proof of its popularity. For physicians, nurses and physiotherapists who are in contact with orthopedic problems, it is not only a "handbook," but a mighty "handy book."

RICHARD S. DODGE, M.D.

Hematology. By Cyrus C. Sturgis, M.D. First Edition. 915 pp. Price $12.50. Charles C. Thomas, Publisher, Springfield, Ill. 1948.

One cannot fully appreciate the tremendous strides made in the advancement of hematology, until he has read through the rather complete compendium of this field of medicine by an author who has himself lived through and participated in much of this development. This volume contains a wealth of material and constitutes a chronological review of the developing concepts of nearly all the different phases of hematology. As a source of information about the ideas which have prevailed in this field, there is no equal. The somewhat detailed treatment of the historical aspects of many of the diseases and concepts add to the value of this book. The placing of the key references at the bottom of the pages is appreciated by the reader seeking complete information.

As is the fault with most first editions, the material appears rather voluminous and in need of more judicious sifting. Some of the repetitions of the development of the ideas and accepted concepts seem superfluous. Also, a more definite editorial expression of the author's own evaluation of some of the controversial discussions would be appreciated by many of the readers. Although the book is not intended to be an atlas, more illustrations and particularly a vast improvement in the colored plates would certainly be welcomed in the next edition. As for its literary style, it seems much too verbose.

Despite its few shortcomings, this volume is certainly an important contribution to our medical literature. It should be a valuable source of information and reference for anyone interested in this field as a specialist, general practioner or student.

T. F. FUJIWARA, M.D.

Medical Clinics of North America. Philadelphia Number. Recent Advances in Gynecology and Obstetrics. 1948 pp. 1483-1771. Price $16.00 a year.

To the specialists and the practitioners with special interests in the field of obstetrics and gynecology, to those who have followed the literature on this field in the medical journals of the past months, this book offers little that has not been told before.

The symposium however does offer much in the field of obstetrics and gynecology to the general practitioner who has little time or means to acquire a good yet concise study of the advances in this special branch of medicine.

Normal and pathological gynecology and obstetrics are presented. The papers on menstruation, the climacteric, and leukorrhea are excellent. The eighteen pages on ovarian cysts and their treatment offer more than can be found in many standard textbooks.

The book, in presenting the papers, pursues the general policy the volumes of the Medical Clinics of North America attempt to follow, and that is to present a comprehensive review of recent medical advances to all members of the medical arts. In view of this, the volume is valued.

CLARENCE F. CHANG, M.D.

Physician's Handbook, Fifth Edition, by John Warkentin, Ph.D., M.D., and Jack D. Lange, M.S., M.D. University Medical Publishers, Palo Alto, California, 1948.

In this edition the authors' objectives—to summarize rather completely the most common laboratory and clinical diagnostic procedures and to provide a ready reference for other useful factual data—have been well met. The total number of clinical subjects covered, and the various tests for each, their normal values, the significance of abnormal findings, and precautions necessary, makes it of considerable assistance, particularly to the hospital staff doctor who finds constant need for such references.

The outline is clear, and the arrangement of the material makes for easy reading. Diagrams and tables are used frequently and are adequate where used. There are many cross references in the body of the text to aid in the correlation of material, and the index is fairly complete. The factual material is found interspersed throughout the procedures, and also in the final portion of the volume forming the second part of the book, presented under topical headings and in the form of separate tables.

There are two things consistently lacking which would add materially to the book's usefulness: First, arrangement of items in tables and lists by order of importance rather than alphabetically. Second, where there is a choice of several tests, an indication of a preference would be helpful to those not familiar with all.

The rapidly changing status of penicillin and sulfonamide therapy makes their outlined usage outdated by the time of publication.

Inaccuracies and errors in nomenclature, and the use of synonyms, are very infrequent.

EDWIN B. ADAMS, M.D.



NOTES AND NEWS

PERSONALS

DR. JOHN STEVEN HORAN, of Seattle, Washington, an interne at The Queen's Hospital, Honolulu, was married to Dr. Mary Elizabeth Godfrey, of Iowa City, Iowa, resident physician at the Territorial Leprosy Settlement, at Kalaupapa, Molokai, on January 29. This was the second time that a wedding of persons who are not patients has taken place at the Settlement, and it was quite a treat to the patients to witness it, and to partake of the festivities. The JOURNAL extends its best wishes for much happiness and success to the bride and groom.

DR. KAZUO MIYAMOTO, of Honolulu, attended the University of California Post-Graduate course in Cardiology and Gastro-enterology in February.

DR. AND MRS. HAROLD M. JOHNSON, of Honolulu, became the parents of a daughter, Barbara, at the Kapiolani Hospital on January 21. The Johnsons also have a son and another daughter.

DR. K. S. TOM, of Honolulu, was married on January 18 to Miss Marjorie K. C. Chun-Hoon, also of Honolulu. They were married at the First Chinese Church of Christ and the wedding dinner was held at the House of P. Y. Chong.

DR. F. C. SPENCER, of Honolulu, attended the meeting of the Obstetrical and Gynecological Post-Graduate Assembly of Southern California, in Los Angeles in February. He also visited obstetric clinics in San Francisco.

DR. EDWARD F. CUSHNIE, of Honolulu, has returned from an extended mainland trip, which included a three months' residency at the Margaret Hague Maternity Hospital, in Jersey City, New Jersey. Following this he spent a month visiting clinics and hospitals in New York City and in New Orleans.

DR. CLIFTON C. RHEAD, formerly of Detroit, Michigan, has joined the psychiatric staff of DR. RICHARD D. KEPNER, of Honolulu. Dr. Rhead is a graduate of the University of Michigan School of Medicine in 1946 and served his interneship at The Queen's Hospital. Following this he was the resident physician in neuropsychiatric diseases at Queen's for a year.

DR. AND MRS. L. Q. PANG, of Honolulu, have returned from the mainland, where Dr. Pang attended the Los Angeles Research Study Club on Ophthalmology and Otolaryngology during its three week meeting.

A distinguished visitor in January was Dr. Ryojun Kinoshita, president of Osaka University, Osaka, Japan. Dr. Kinoshita was on his way home after delivering papers on his cancer research at various national and local medical meetings on the mainland, including the American Cancer Society meeting in New York. While here Dr. Kinoshita kindly consented to speak before several medical groups reporting his work on transmission of a sarcoma in rats, which sarcoma was produced by a virus after passage through the Berkefeld filter. He also reported on his findings on the carcinogenetic properties of butter yellow in producing cancer of the liver experimentally. As a further gesture of good will Dr. Kinoshita made some transcriptions in Japanese to be used for education locally in the Hawaii Cancer Society program for cancer control.

DR. CLAGETT BECK, of The Clinic, has returned after spending three months in graduate study in internal medicine in New York City.

DR. JOHN C. MILNOR, of The Clinic, is spending several years on the mainland, where he has begun a residency in pediatrics at the Children's Hospital, Washington, D. C.

DR. ROBERT P. JAY has returned to Honolulu to become associated with DR. LYLE G. PHILLIPS. Dr. Jay was formerly resident in obstetrics and gynecology at the Kapiolani Hospital in 1945, following which he returned to Indianapolis for further training in obstetrics. He is a graduate of the Indiana University Medical School in 1944 and served in the Navy in the Pacific, including a period as obstetrician for Navy dependents at Pearl Harbor. His wife is the former Miss Lee Rydman, who taught at Punahou School.

DR. DOUGLAS H. MURRAY became associated in January with The Fronk-Wynn Clinic, where he will limit his practice to pediatrics. Dr. Murray was formerly associated with DR. LYLE G. PHILLIPS.

DR. AND MRS. HOMER IZUMI, of Honolulu, have returned from an extended mainland stay, during which time Dr. Izumi spent about four months in graduate study in internal medicine at Cook County Hospital, Chicago. Following this he visited a number of medical centers in the east and south.

DR. MORTON E. BERK, of The Medical Group, is spending ten months at the Stanford-Lane Hospital in San Francisco, where he is taking graduate work in internal medicine.

DR. W. B. PATTERSON of Puunene, President of the Territorial Association of Plantation Physicians, will be the guest of honor at the annual banquet of the American Association of Industrial Physicians and Surgeons, April 7, in Detroit, Michigan.

The Queen's Hospital announces the following additions to the house staff: DR. GUSTAVE S. BEAVER, of New York City, is the resident in obstetrics and gynecology. He is a graduate of Duke University Medical School in 1943, interned at the University of Chicago Clinics. He then became a resident in internal medicine for one year at the same hospital before taking a residency in obstetrics and gynecology from 1945 to 1947 in Wilmington, North Carolina. DR. JAMES HARRISON, who recently finished his interneship at Queen's, is the assistant resident in psychiatry. New internes include DR. WALLACE E. CHIN, a native of Honolulu, who was graduated from the College of Medical Evangelists in 1948; DR. RALPH J. COPPOLA, of Patterson, New Jersey, who is a graduate of the University of Chicago in 1948; DR. WILLIAM K. GRAVES, of Chicago, is also a graduate in 1948 of the University of Chicago Medical School.

DRS. H. L. ARNOLD, JR., and F. J. PINKERTON returned in February from a five day trip to Chicago, where they attended the opening meeting of the A.M.A.'s new public relations campaign.

DR. O. D. PINKERTON has recently been certified by the American Board of Ophthalmology.

DR. JOHN J. LOWREY will be associated with The Clinic after March 1 in the practice of neurosurgery. He is a graduate of Harvard Medical School in 1940, took his interneship at the Peter Bent Brigham Hospital and Children's Hospital in Boston and had a residency in the National Hospital for Nervous Diseases, Queen Square, London from February 1947 to January 1948. Dr. Lowrey was a neurosurgeon in the Army from September 1944 to November 1946. He has recently returned to the islands from Boston where he was Junior Associate Neurosurgeon at Peter Bent Brigham and Children's Hospitals.

DR. CYRUS W. LOO has recently opened his office at 1124 Alakea Street, Honolulu, for the practice of syphilology and dermatology. After graduation from the University of Cincinnati Medical School, he served his internship at The Queen's Hospital and a general residency at the St. Francis Hospital. He trained for three years in dermatology and syphilology at the University of Virginia Hospital, and subsequently for shorter periods at Duke University Hospital, Johns Hopkins Hospital, and the Children's Hospital, Washington, D.C. Dr. Loo has passed the examination of the American Board of Dermatology and Syphilology.

The Murphy-Dillon X-Ray Film Projector

Two young doctors, recently graduated from Medical Schools and cognizant of the many difficulties heretofore encountered in attempting to show roentgen ray films to large or small groups, have invented a projector which provides excellent visualization of x-ray films for all types of audiences. No slide making is necessary. The entire film library of a hospital is made immediately available for routine demonstrations. No detail is lost in projection, for the original film is used as the image.

Multiple films such as sinus pictures or spot films may be shown simultaneously. For standard size films up to 14" x 17", there is a built-in adjustable mask. Light intensity is easily regulated to the film density by diminishing the aperture of the iris in the projecting system.

The two young men who have brought about this sensational advance in the progress of medical education are Dr. Raymond A. Dillon and Dr. William P. Murphy, Jr. Dr. Dillon is a radiologist, graduate of Harvard Medical School. Dr. Murphy was graduated from the University of Illinois Medical School and is at present pursuing an internship at the St. Francis Hospital here in Honolulu.

The projector won a Certificate of Merit for its excellence from the American Roentgen Ray Society. It also was awarded Honorable Mention by the Radiological Society of North America at its recent convention in San Francisco. Dr. Murphy is very modest about the honors he and Dr. Dillon have received because of their invention. However, he states that this is the first projector of its kind made in America. Similar types had been made in Germany before the war, but apparently were not satisfactory.

Dr. Murphy and his collaborator hope to have a three hundred pound, all-collapsible model available for medical schools and hospitals in the near future. The present model is the only one in existence and was made by hand.

Help Someone Help Themselves Dept.

The Notes and News Editor would like to call your attention to "Bert Nott's Magazine Subscription Shop." Bert is completely incapacitated by severe polio, necessitating the use of a Drinker Respirator at night, plus a cardiac ailment. He is trying to make a little money on his own, even though he has been bed-ridden for six years. If any reader would care to re-new or enter a subscription to any mainland or local magazine, please call 72094 and tell Bert about it up until 9 p.m., when he goes back in the "iron lung." Or write him at 1028 10th Avenue, Kaimuki, Honolulu.

ORGANIZATIONS

Honolulu Obstetrical and Gynecological Society

The January meeting program consisted of a case report on chorio-epithelioma, by Dr. Satoru Nishijima, with discussion being opened by Dr. Richard Sakimoto. A talk on observations of a recent mainland tour of study at gynecological centers was given by Dr. Colin McCorriston.

Dr. F. J. Roos, of Chicago, gave a talk on "Gynecological Surgery in the Elderly Patients" at the February meeting. Dr. Roos is chief obstetrician and gynecologist to the Illinois Central Railroad Hospital, and is on the teaching staff of the University of Illinois. A movie on Vaginal Hysterectomy by the Clamp Method was shown before the talk.

Woman's Auxiliary

The new Woman's Auxiliary to the Hawaii Territorial Medical Association was organized June 7, 1948. Its officers are as follows:

President: MRS. FRANK C. SPENCER
President elect: MRS. WILLIAM BERGIN
Vice-President: MRS. SAMUEL L. WALLIS
Vice-President: MRS. WILLIAM PATTERSON
Recording-Secretary: MRS. RICHARD CHUN
Corresponding-Secretary: MRS. ROBERT JOHNSTON
Treasurer: MRS. KYURO OKAZAKI

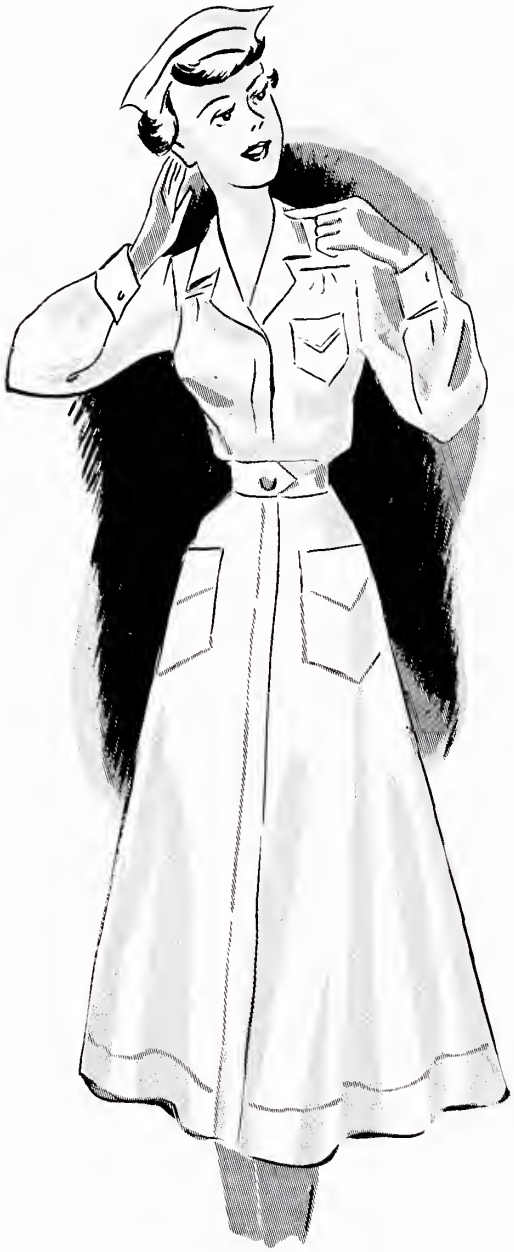
The Woman's Auxiliary to the Maui County Medical Society was formed on June 8, 1948 with the following officers:

President: MRS. WILLIAM PATTERSON
Vice-President: MRS. HAROLD KUSHI
Secretary-Treasurer: MRS. A. J. BELAND
Corresponding-Secretary: MRS. MAMORU TOFUKUJI
Auditor: MRS. W. T. DUNN

On January 25, 1949 the Woman's Auxiliary to the Honolulu County Medical Society elected its first officers, who are:

President: MRS. RALPH B. CLOWARD
Vice-President: MRS. FRED LAM
Recording-Secretary: MRS. THOMAS FUJIWARA
Corresponding-Secretary: MRS. DOUGLAS MURRAY
Treasurer: MRS. C. M. BURGESS

As its first project, the Territorial Auxiliary raised $226.00 in voluntary contributions, which was presented to the Territorial Nurses' Association at the time of the Diamond Jubilee of Nursing. The members of the Territorial and Honolulu County Auxiliaries are assisting with plans for the annual meeting of the Hawaii Territorial Medical Association to be held May 5-8, 1949 in Honolulu. At the public meeting of the Hawaii Heart Association, members of the Honolulu County Auxiliary assisted with the ushering and the enrollment of members. Thus the Auxiliaries are already demonstrating their value.



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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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CITY AND COUNTY OF HONOLULU NURSES' ASSOCIATION

Retiring President Laura Draper in her annual message to the C&C Nurses' Association asked *What of our future?* and then went on to say:

"I believe that we are ready to participate to a greater extent in national thinking and planning about nursing problems. At this distance from national headquarters, with mail often reaching us late, there is a temptation to let the mainland nursing associations solve our problems. It is easy to think that their combined decisions will be as good as ours, and that we are too small to make much difference. That attitude is more harmful to us than to the ANA, since it would mean relinquishing our part in the democratic process. You will be glad to know that a small group of representatives from the Territorial Association, the City and County Association, the League of Nursing Education and the Board for Licensing of Nurses met last month (December 1948) to plan coordination of programs of the organizations involved and strengthening of programs.

"With the employment of an executive secretary we will be in a position to go ahead with our efforts for economic security for nurses, and the need for action is becoming more urgent.

"We have talked about an economic security program ever since the ANA convention in 1947. Not a great deal of interest has been demonstrated by the nurses here, chiefly I think, because their situation has been favorable. If we rely upon it continuing so, we are closing our memories to the past. Most of us have been in nursing long enough to know that world conditions affect demand for nursing just as they affect other commodities. We can remember the depression of the thirties when nurses' salaries went as low as $40.00 for general duty in some hospitals and in others nurses worked for board and room. If we let ourselves drift without organizing for representation of nurses by our professional association, we may in time of need find ourselves as helpless as a ship that runs into rough weather with an unprepared crew and a broken tiller.

"An executive secretary will do much to centralize and carry forward such a program. We increased dues so that we could have one. We must maintain membership so that we can meet budget requirements. We can all very honestly present membership in the nurses' association as a sort of insurance—a protection for ourselves against economic difficulties that may lie ahead."

Thank you, Miss Draper, for your fine service to the Association, for your interest and efficient management of the many problems that demanded your attention during your term of office.

A cordial welcome is extended to President Myrna Campbell who will be in office during 1949-50 and to her associates for this period:

Mrs. Ethel Brown, Vice-President
Mrs. Margaret Wong, Second Vice-President
Miss Elsie Ho, Secretary
Miss Bernadette Yoshina, Treasurer
Sister Walter Damien, Miss Michiko Kikukawa, Miss Kiyoko Yafuso, Mrs. Rae Keleher, Mrs. Virginia Ahrendt, Miss Anne Chang, Directors.

A vote of thanks is also due the fine work done by other officers of the Association as well as the various committees. Particular praise goes to the program committee for the variety of interesting programs provided during the year and to the membership committee for its outstanding contribution—601 members by the end of 1948, an increase of 16 per cent during the year.

Membership

As we go to press our membership totals 328, representing a loss of 45 per cent over the previous year. The 328 members who have shown their

approval of the increased dues and have demonstrated willingness to assume responsibility are now called upon to accept individually the challenge of convincing the delinquent membership that they are depriving themselves of many benefits by thus deserting the association during this crucial period of re-organization.

In case you cannot easily recall the benefits of being an active member of your nursing association the following information may be used in your sales talks:

1. Joining your *District Association* means you also joining your *Territorial Association, American Nurses' Association, International Council.*
2. By joining with thousands of other nurses *you* make possible:
   a. A strong professional nurses' organization.
   b. Development of your professional association as exclusive spokesman for nurses in all economic security matters.
   c. Establishment of counseling and placement service to provide the right job for the right person.
   d. Group action for improvement of wages, hours, and working conditions.
   e. Improvement of professional standards.
3. By joining your *District Association* you become eligible:
   a. To join special sections such as Industrial Nurse Section, General Duty Nurse Section, School Nurse Section, Private Duty Nurse Section, League of Nursing Education.
   b. To borrow books from the Medical Library in Mabel Smyth Building.
   c. To receive without further cost the *Inter-Island Nurses' Bulletin* in conjunction with the HAWAII MEDICAL JOURNAL.
   d. To join Hawaii Medical Service Association at group rate.
   e. To contribute to and make use of Nurses' Blood Bank.
   f. To borrow for educational purposes from Margaret Jones Memorial Fund.

To give an indication of what other associations were doing in 1947 we are listing some state and district annual dues to compare with our own:

Wisconsin, Milwaukee (includes State & ANA)	$18.00 per year
California, Sacramento	39.00
" , Los Angeles	28.00
" , Oakland	32.00
" , Fresno	30.00
" , Vallejo	25.00
" , San Jose	27.75
" , Salinas	25.50
" , San Francisco	28.00
Utah, Salt Lake City	22.00
New York, Syracuse	18.00
Louisiana, Shreveport	34.75
Washington, Seattle	24.00
Virginia, Arlington	19.00
Washington, Tacoma	22.00
Washington, D. C.	28.00
Utah, Ogden	23.00
Minnesota, St. Paul	20.00
Nebraska, Omaha	19.25

We have no recent reports at hand, but by this time many districts have undoubtedly had to raise dues again. The $21.00 dues for C&C Association are divided into $13.00 for the Territorial Association, $3.00 for ANA, $1.00 for Nursing Service Bureau, and $4.00 for City and County Association.

Application blanks may be obtained from the Association Office, Mabel Smyth Building. Delinquent members must now pay $1.00 to be reinstated.

* * *

KAUAI NURSES' ASSOCIATION

The monthly and annual meetings of the Kauai Nurses' Association were opened by President Claire Carra on January 10, 1949 at the Makaweli Club House. Thirty members and guests were present.

The first part of the afternoon was allotted to the monthly meeting at which time a report was given that 459 calendars were sold by the Association. Members voted to buy a tuberculosis bond as a contribution towards the 1948 campaign. Three new members, Miss Barbara Davis, executive secretary of the Tuberculosis Association, Mrs. Esther Kono and Miss Rebecca Tuttle of Mahelona Hospital were welcomed into the Association.

Mrs. Douglas Thomson, Director of Home Nursing, Hawaiian Chapter of the American Red Cross gave an enlightening talk on the new Red Cross enrollment plan and the disaster nursing program.

The annual meeting followed and various committee reports were given which significantly revealed the completion of another year of activities adequately carried out by the Association. New officers for 1949 are Miss Elizabeth Middleton, President; Mrs. Florence Knapp, First Vice-President; Miss Kimie Tamashiro, Second Vice-President; Mrs. May Jenkins, Secretary; Mrs. Grace Furugen, Treasurer, Miss Mabel I. Wilcox and Mrs. Claire Carra, Trustees.

Mrs. Pauline Johnson has joined the staff of the G. N. Wilcox Memorial Hospital as anesthetist. Mrs. Johnson was at one time chief anesthetist at The Queen's Hospital in Honolulu. She served with the armed forces for several years during the war.

Miss Edythe M. Kamida and Miss Betty F. Yamauchi have recently joined the nursing staff of G. N. Wilcox Memorial Hospital. Both are recent graduates of The Queen's Hospital School of Nursing and prior to entering the training course were Kauai residents.

MAUI DISTRICT NURSES' ASSOCIATION

The annual dinner meeting was held at the Puunene Club on Thursday, January 20. Miss Estelle Mahan reported on the General Duty Nurses' Section meeting which she attended recently in Honolulu.

Officers for the ensuing year are:

Miss Elizabeth Sheridan, Kula Sanatorium, President.

Miss Estelle Mahan, Paia Hospital, Second Vice-President.

Mrs. Isabelle Chung, Puunene Hospital, Corresponding Secretary.

Miss Hinayo Ikeda, Paia Hospital, Treasurer.

Miss Neva Harris, Department of Health, Miss Rose Litell, Paia Hospital, Miss Margaret Kinney, Wailuku Sugar, Miss Elizabeth Morishige, Department of Health, Miss Florella Berry, Pioneer Hospital, Miss Modista Singlehurst, office nurse, were elected directors.

NURSES ASSOCIATION, COUNTY OF HAWAII

The annual meeting of this Association was held in January. Officers elected for 1949-51 are:

Winnifred Golley, President.
Annette Hammersland, First Vice-President.
Nettie Hashida, Second Vice-President.
Bess Hammer, Secretary.
Eleanor O'Brien, Treasurer.
Board of Directors: Jettie Jacobson, Betty Harbottle, Margaret Dauterman.

Several new committees have been appointed to develop an active interest on the part of the members in their association. The committees and chairmen are as follows:

Careers and Vocations (to stimulate activity with High School pre-nursing clubs)—Clara Mitchell.
Arrangements—Chieko Tanaka.
Red Cross Disaster—Mary Stanley.
Finance—Darlene Kubota.
General Duty Nurses—Gladys Chun.
Florence Nightingale Service—Thelma Patten.
Annual Dinner—Annette Hammersland.

Other committees and chairmen are:

Membership—Jean MacDonald.
Program—Eunice Graham.
Publications, Radio and Press—Grace Lusby.
Nominations—Hideko Kagimoto.
Jane Service Memorial Library—Jettie Jacobson.
Legislation—Helen Norton.
By-Laws—Betty Harbottle.
Nursing Service—Margaret Dauterman.
Visiting the Sick—Dora Muraki.

The rural nurses who are unable to attend the District Association meetings in Hilo are making plans to hold meetings in the Kau, Kona, Kohala and Hamakua Districts each month.

Dr. Normal Sloan of Kalaupapa Settlement will be the featured speaker on Leprosy for the February meeting. He will also meet with the district groups in Pahala, Kona and Honokaa.

GENERAL DUTY NURSES' SECTION

Organization of the General Duty Nurses' Section of the Territorial Association began in January 1949 with Frances Kupau as chairman, Dorothy Hartman representative from Kauai, Estelle Mahan from Maui and Gladys Chun from Hawaii. After plans have been completed for the Section, local groups will be set up for all the Islands.

As guests of ANA Frances Kupau attended the General Duty Nurses Section conference in Chicago on February 14, 15, 16, 17 and Lillian Jonsrud attended the Private Duty Nurses Section. Subjects considered included general ANA program, counseling and placement, insurance and retirement plans, Economic Security Program, section organization, public relations, the Brown Report, practical nurses, the Structure Study.

At the conference for Industrial Nurses' Sections chairmen in New York City, March 16, 17, 18 and 19, Hawaii was represented by Lois Bell. She will also attend the National Convention of Industrial Nurses to be held in Detroit, Michigan in April. Subjects to be considered by this group include general ANA program, Economic Security Program, section organization and function, ideal state program, panel on public relations, panel of attorneys on legal aspects i.e., Taft-Hartley, labor laws in different states, legislation, malpractice insurance.

Mrs. Arlene Thompson attended the Counseling and Placement Institute held at the University of Minnesota in March.

COURSE IN PSYCHIATRIC NURSING PLANNED FOR STUDENTS

Miss Mary E. Corcoran, Consultant in Psychiatric Nursing, U. S. Public Health Service, visited Honolulu in February in connection with the establishment of a course in psychiatric nursing for affiliating students at Territorial Hospital, Kaneohe. Students from Kuakini, St. Francis and The Queen's Hospitals will participate. The first class is expected to begin March 1 and will cover a period of eight weeks.

ANNOUNCEMENT

Attention Veteran Nurses! Jane Delano Post 19, The American Legion, Department of Hawaii, an all women's post, invites any veteran to attend meetings which are held the first Wednesday of each month at 7:30 p.m. Meetings will be held in members' homes, names and addresses to be announced in the Sunday newspaper preceding the meeting. For further information call American Legion headquarters at 612 McCully Street, Telephone 96383.

NURSING CARE STUDY OF A CEREBRAL VASCULAR ACCIDENT

HAZEL SEU*

Mr. H., a 52 year old, well developed, obese unemployed Filipino carpenter seemed to be extremely sensitive about his illness. He was a cooperative patient, attempting to do whatever was asked of him. He wor-

---

* Student, Class of 1949, The Queen's Hospital.

ried a great deal and was depressed and uncommunicative most of the time.

A widower, Mr. H. had three children—a daughter, 19, clerk-typist; a son, 20, truck driver; another son, a patient at a local hospital. Being unable to pay the entire hospital bill, Mr. H. was later transferred to staff care under the City and County service. The family seemed to be living in a haphazard condition, trying to make ends meet in a home without a mother or a stable bread earner.

Mr. H. was in good health except in 1947 when he was hospitalized and treated for hypertension. He states he experienced dizziness of many years' duration. On the afternoon of his admission, Mr. H. noted that his right hand, arm and leg became suddenly weak and at the same time, the muscles of the right side of his face became flaccid. There was no pain or further change.

Upon physical examination, it was found that he had a divergent strabismus. Mr. H. had severe frontal headaches and progressing difficulty in talking, resulting in slurred speech. Examination of the heart revealed an enlargement of about three centimeters. The rhythm was regular, tones fair, and there was a buzzing, grade two systolic murmur.

The abdomen was soft, with no tenderness or masses. The right arm and right leg showed progressive paralysis and the patient was no longer able to make a fist.

The impression upon admission was hypertension with cerebral vascular accident. The slow progression of the paralysis was possibly due to a thrombus. Cerebral accident or apoplexy is a spontaneous intracerebral hemorrhage from the rupture of a diseased artery, due to arteriosclerosis or miliary aneurysms. The most common of cerebral accidents is the rupture of a cerebral artery with the escape of varying amounts of blood into the surrounding brain tissues. It may occur at any age, but usually after the fortieth year and in men more frequently than in women.

Medical History Since Admission

After a week, Mr. H. began gradually to regain the use of his leg although his arm was still paralyzed. As time passed, the paralysis of the right arm decreased.

After a short period, the patient apparently developed hypostatic pneumonia with dullness and rales over the lung bases. The temperature was elevated, but became normal with the administration of penicillin.

Because of abdominal distention, many diagnostic tests were done. A ureteral dilation was done, but the stone which was seen on the flat plate of the abdomen could not be reached. It was hoped that the patient would pass it upon urination. The diagnosis of a possible paralytic ileus was made. In this condition, the peristaltic movement becomes decreased due to the traumatic or toxic effect on the nerves. This results in distention of the intestines with flatus, causing the extreme discomfort which Mr. H. experienced.

To rule out the possibility of an intestinal obstruction, a barium enema was given. The enema solution flowed freely through the entire colon, cecum and terminal ileum demonstrating no filling defect or obstruction. The gastro-intestinal series of films also showed no significant findings.

Renal function tests were done. The non-protein-nitrogen test to evaluate renal function of non-involved kidney substance rose to 68 (normal 20-35) showing the failure of the kidney to reabsorb the protein normally present in the tubular fluid. The phenolsulfonephthalein test showed decreased tubular function. An intravenous pyelogram showed moderate dilatation of the left renal pelvis and calices. The left ureter was not visualized, indicating an obstruction, apparently by a calculus at or near the left ureteropelvic juncture.

Mr. H. was then transferred to the genitourinary service where he received further diagnostic tests and treatment.

Nursing care and therapy

Upon admission, Mr. H. was immediately put in bed and made comfortable. As he was fully conscious and rational, it was possible to explain procedures to him. Upon admission, his temperature was 98.4° F., pulse 66, respirations 28, and blood pressure 168/120.

Phenobarbital ½ grain three times daily was given to keep the patient quiet and relaxed. Seconal 1½ grains was ordered at night for sleep. Aspirin 10 grains and codeine sulphate ½ grain was a prn order for headache. The medications were used whenever Mr. H. needed to be relieved of apprehension or pain or both.

Because of the possibility of diabetes mellitus, Sheftel sugar tests were done four times a day, one half hour before each meal and at bedtime. It was important to obtain a fresh urine specimen and to carry out the test precisely in order to have accurate readings. The tests gave negative results and were discontinued after five days.

Good back and skin care was imperative as Mr. H. was a rather obese man. It was an important nursing duty to keep the linen dry and free of wrinkles to prevent decubitus. Alcohol back rubs were given to improve the condition of the skin. Mr. H. was frequently turned from side to side and propped with pillows for support.

After five days, moist rales were heard over both lung bases. His temperature gradually rose. Hypostatic pneumonia had apparently developed. Deep breathing for three minutes in a sitting position three times daily was instituted. Crysticillin 300,000 units daily was ordered to help combat the pneumococcic infection. It is important to mix the drug well and to give it intramuscularly into the inner aspect of the upper outer quadrant of the buttocks.

To relieve the abdominal distention and distress in the following days, morphine sulphate ¼ grain with atropine sulphate 1/150 grain was given as necessary. Atropine sulphate was used to check salivary secretions and to counteract the respiratory depressive effect of morphine sulphate which served as a good analgesic agent. Several doses of prostigmine 1:1000 were given to increase peristalsis and muscle tone. A rectal tube was inserted to relieve distention, but had little effect. An attempt was made to insert a Miller-Abbott tube but Mr. H. was uncooperative and unable to keep the tube down.

Turpentine stupes every hour were then ordered by the doctor to aid in expulsion of flatus. The stupe flannels were wrung free of moisture to avoid burning the patient's skin. It was imperative to check every fifteen to twenty minutes for any extreme redness. Mr. H. was cooperative and willing to submit to this hourly procedure. He obtained some relief.

Because of abdominal distention and distress, Mr. H. had difficulty in eating. Though he was on a full diet, he would only drink the fluids after much persuasion. Intravenous solutions of 5 per cent glucose in saline were necessary to maintain body fluids and nourishment. A frequent check on possible infiltration of the solution into the tissues was important.

An intake and output record was kept to determine

if Mr. H. was taking adequate fluids and voiding in sufficient quantities. The urine was strained for the suspected calculi but none were seen although the patient stated that he passed a stone. He appeared to be in less pain thereafter.

Sulfaguanadine 0.5 gram, sudfadiazine 0.5 gram, sulfathiazole 0.5 gram with soda bicarbonate 2 grams with two glasses of water were administered every four hours. These drugs are used in the treatment of renal infections caused by gram negative organisms. Fluids had to be forced on Mr. H. and the output was watched because of the possibility of blockage of the urinary tract by the acetyl crystals of the sulfonamides.

Mr. H. gradually regained functional use of his right leg, arm and hand. He was encouraged to do passive exercises of these involved parts, and with the help of the physiotherapist, made rapid progress.

Upon discharge, Mr. H. was ambulatory with a slight residual paralysis. He was instructed not to overexert himself and to try to lead a sedentary life. His family was also instructed to keep him quiet and to restrain him from any fatiguing activity. With good home care and cooperation, Mr. H. should be able to live comfortably.

This nursing care study has made me conscious of the importance of adapting nursing care to each individual patient with emphasis on the prevention of complications such as hypostatic pneumonia and decubitus. It has shown me the value of the accurate observation and recording of symptoms as an aid to the physician in making the correct diagnosis and determining the proper treatment. I have learned to understand the various diagnostic tests and the importance of accuracy in helping to carry out these tests.

I was quite impressed by the cooperation of the various departments of the hospital such as the laboratory, social service and physiotherapy department in providing the total care and treatment necessary for this patient.

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NURSES' ASSOCIATION, TERRITORY OF HAWAII

Standing Committees for the year 1948-49

Finance:
Harriet Kuwamoto, Chairman; Tamae Fujii, Sister Jolenta, Arlene Sprunger, Lucille Otto, Natsuyo Oshiro, Treasurer of C&C Assoc.

Program:
Alison McBride, Chairman; Esther Conroy, Toshiko Matsui, Ethel Edgar, Evelyne Thomson, Millicent Larson.

Legislation:
Annette Bilger, Chairman; Rae Keleher, Eleanor Enomoto, Hideko Kagimoto (Hawaii), Hinayo Ikeda (Maui), Florence Knapp (Kauai), Virginia Ahrendt, Edith Bell.

Constitution and By-Laws:
Sister Mary Laurine, Chairman; Mary Evelyn Cabral, Kiyoko Yafuso, Claire Anderson, Anna May Burns.

Membership:
Dorothy Tong, Chairman; Aiko Yano, Mildred Asato, Elizabeth Middleton (Kauai), Mildred Manty (Maui), Roberta Lindberg (Hawaii), Frances Kupau, Emilia Centeio, Esther Higuchi, Marjorie Namiko, Teruko Sakakida, Anne Chang, Audrey Scales.

Nominations:
Mirriam Keller, Chairman; Bernadette Yoshina, Laura Wong (Maui), Helen Gage (Kauai), Annette Hammersland (Hawaii).

Nursing Information:
Myrtle Schattenburg, Chairman; Violet Buchanan, Myrna Campbell, Elizabeth Middleton (Kauai), Eileen MacHenry (Maui), Eunice Graham (Hawaii), Mildred Pinner, Minnie Reid, Arlene Thompson, Dorothy Tong.

Special Committees

Library:
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Wages, Hours, Personnel Policies:
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Margaret Jones Memorial Fund:
Mabel Gordon, Chairman; Inez Lange, Margaret Makekau.

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Practical Nurse:
Patience Martelon, Chairman; Roberta Lindberg (Hawaii), Thelma Hensley (Kauai), Rose Littel (Maui), Elsie Lee Park, Marjorie Elliott, Elaine Johnson, Effie Dewar.

Army Nurse Procurement:
Marian Boggs, Chairman; Erma Burgess, Aileen Robinson, E. Patterson Morris, Eileen Campbell, Dorothy Hartman (Kauai), Representative from Hawaii, Representative from Maui.

Representatives:
Mabel Smyth Memorial Building Board—Agnes Peterson, Myrtle Schattenburg.
Public Affairs Committee—Laura Draper.
Oahu Health Council—Loretta Schuler, Arlene Thompson.
Medical Care Advisory Board of Dept. of Public Welfare—Sister Marie Therese.
Red Cross Disaster Committee—Olga Larson, Elaine Johnson.
Infantile Paralysis Emergency Program Committee—Elaine Johnson.
Scholarship Committee of Honolulu Chapter National Infantile Paralysis Foundation—Paula Sorg.

THE ANA ADVISORY COUNCIL AT WORK

VIRGINIA A. JONES, R.N.*

The Advisory Council for the American Nurses' Association meets annually just before the meetings of the ANA Board of Directors to discuss matters to come before the Board and to formulate recommendations and suggestions in regard to these matters. All state association presidents and executive secretaries are

* President, Nurses' Association, Territory of Hawaii.

members of that council. This is the first time Hawaii has had a representative present.

This year's meeting was held in New York on January 21 and 22. Sixteen subjects of vital interest to nursing were discussed as follows with some comments which seem to me are important for nurses in Hawaii:

Army Nurse Recruitment Program

Recruitment quota figures have been revised downward due to consolidation of services and budget reductions. Further revisions may occur. Hawaii has no quota as a Territory, but is included in the San Francisco regional quota. Nine hundred civilian nurses now employed in army and navy hospitals will return to civilian service if the recruitment program is successful.

National Security Resources Board

Miss Ruth Freeman has been loaned by the Red Cross to this Board to direct the setting up of a balance sheet of resources and nursing needs for war time and to suggest plans for use of resources and provision for deficits. This involves a national inventory of professional nursing, practical nursing, and nurses aides. You have already received through the Board of Licensing in states where you are licensed, inventory forms to be filled in for information for this Board.

Displaced Persons

The Displaced Persons Act of 1948 allows for the admission of 200,000 displaced persons in the twenty months following the effective date of the Act. Such persons must have individual or organization sponsors through whom they are assured employment and housing. The Advisory Council at this meeting passed a motion to ask the ANA Board to set up policies for helping nurses in this group of displaced persons.

Participation of Non-Governmental Organizations in United Nations Activities

James B. Orrick, chief of the division of non-governmental agencies of the United Nations, reported that the American Nurses' Association has been given accredited observer status in the United Nations and can attend meetings as an observer. This is accreditation similar to that given the press. Mr. Orrick asks that organizations so accredited find out what happens in detail in UN meetings, learn what the U. S. representative has said, evaluate it and report to him the organization's thinking in relation to the U. S. participation. A better job of public relations needs to be done for UN.

Biennial Nursing Convention — 1950

The 1950 Biennial Convention will be held May 7-12 in San Francisco. The Advisory Council recommended to the ANA Board that the registration fee be raised from $2 to $3 to help care for increased costs of the convention. Members are reminded that a $5 deposit fee must accompany request for each hotel reservation.

ANA Committee on Retirement Plans for Nurses

The committee reported on its study of the Lennox Hill Hospital retirement plan which had been discussed at the House of Delegates meeting in 1948. After an exhaustive study, the committee will report to the House of Delegates in 1950 (where it will come up for vote) that the plan is *not* practicable. The committee asks that a questionnaire be sent to the state nurses' associations to get their thinking on various issues raised in this plan in order to better evaluate plans in the future.

Report on Federal Legislation

This committee reported on legislation in progress which is of interest to the nursing profession. Material distributed at the meeting will be given to the Legislative Committee of the Territorial Nurses' Association for appropriate distribution to the District Committees.

Public Relations Committee

As a result of a questionnaire sent to state nurses' associations, the Council recommended priority of emphasis in the following order on these topics: 1. Economic security and nursing service; 2. Legal control of nursing; 3. Cooperation with other organizations; 4. Placement and counseling.

Nominations and Resolutions

The Council recommended the adoption of committee plans to simplify receiving names for nominations and resolutions for action from state nurses' associations.

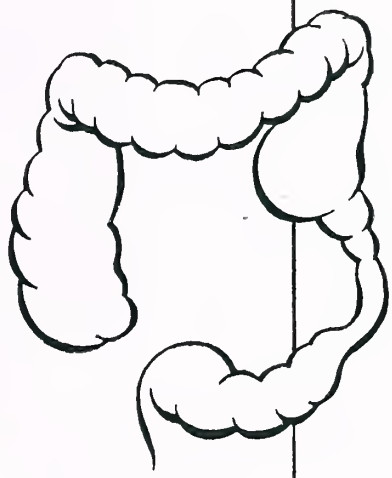
State Reports on Economic Security

Each state reported on progress in the economic security program. The pattern seemed to be: Legal advice to set up the program, survey of practices, formulating and distributing of minimum standards, gaining cooperation of employer and consumer groups and collective bargaining as necessary. All states had done something but each was in a different stage of development. In comparison, we are just making a beginning.

Since this report is hitting just the highest spots, the detailed reports will be made available to committee members and district associations from the office in the Mabel Smyth Building.

Bowel Management of the Irritable Colon . . .

"As an aid in reestablishing a normal rhythm, the temporary use of a bland bulk-producer . . . may be beneficial. . . . Patients having irritable colon who believe they are suffering from constipation commonly use high-residue diets, . . . They may not realize that this practice is similar to using irritating cathartics or large enemas and often increases the tendency to constipation by increasing spasm of the colon."*



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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

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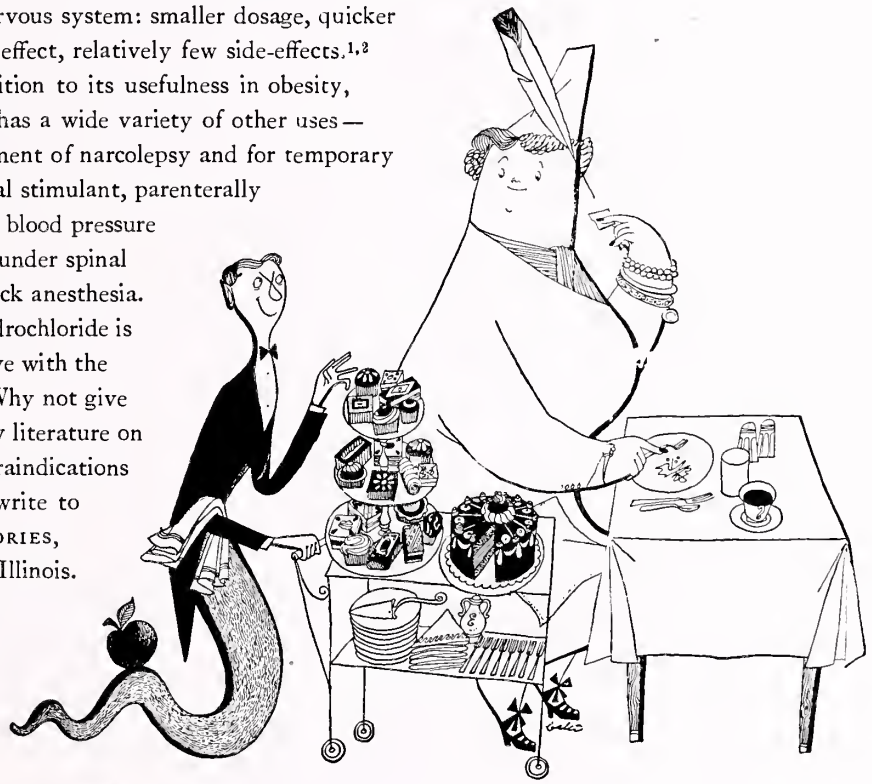
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*Snyder, M. L., Kiehn, C. L. and Christopherson, J. W.: Mil. Surgeon, *97*: 380, 1945. • Shipley, E. R. and Dodd, M. C.: Surg., Gynec. & Obst., *84*: 366, 1947 • Mays, J. L.: J. Med. Assoc. Georgia, *36*: 263, 1947. • Curtis, L.: Surg. Clin. N. America, 1466 (Dec.) 1947.

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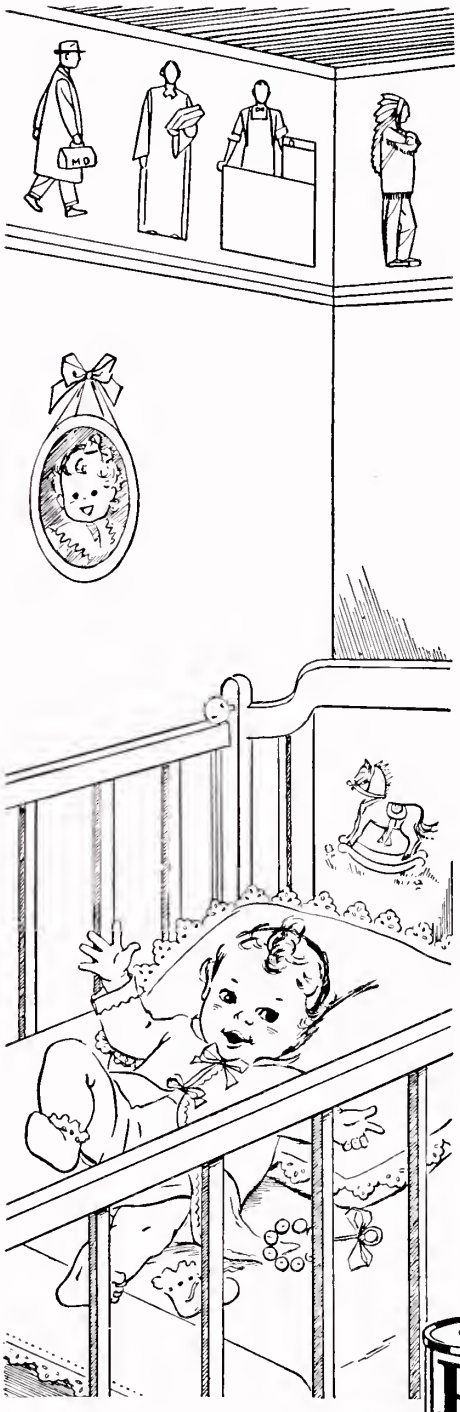


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1. Ivy, A. C., and Goetzl, F. R. (1943), d-Desoxyephedrine; A Review, War. Med., 3:60, January.
2. Davidoff, E. (1943), A Comparison of the Stimulating Effect of Amphetamine, Dextroamphetamine and Dextro-N-Methyl Amphetamine (Dextro-Desoxyephedrine), Med. Rec., 156:422, July.

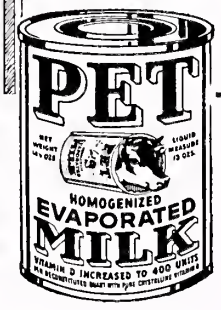


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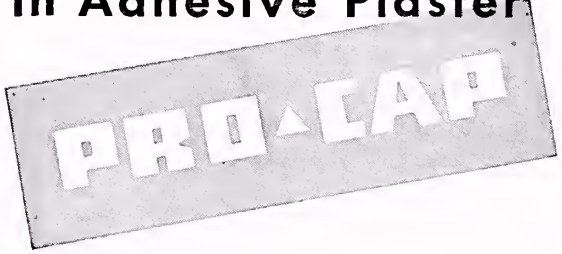
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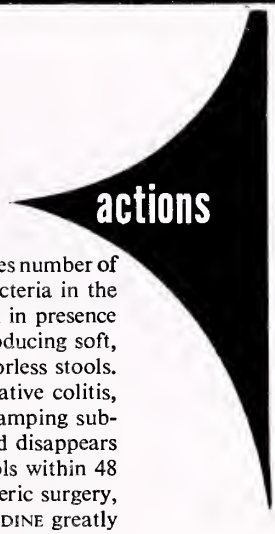
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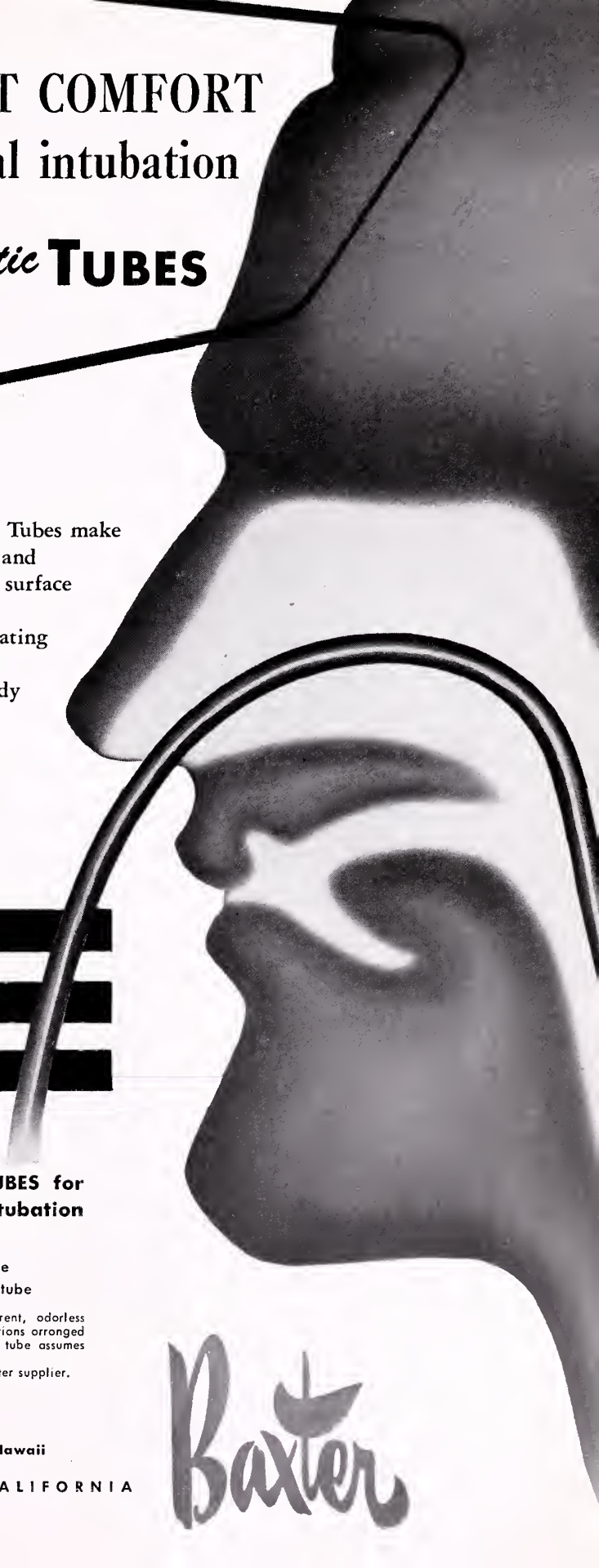
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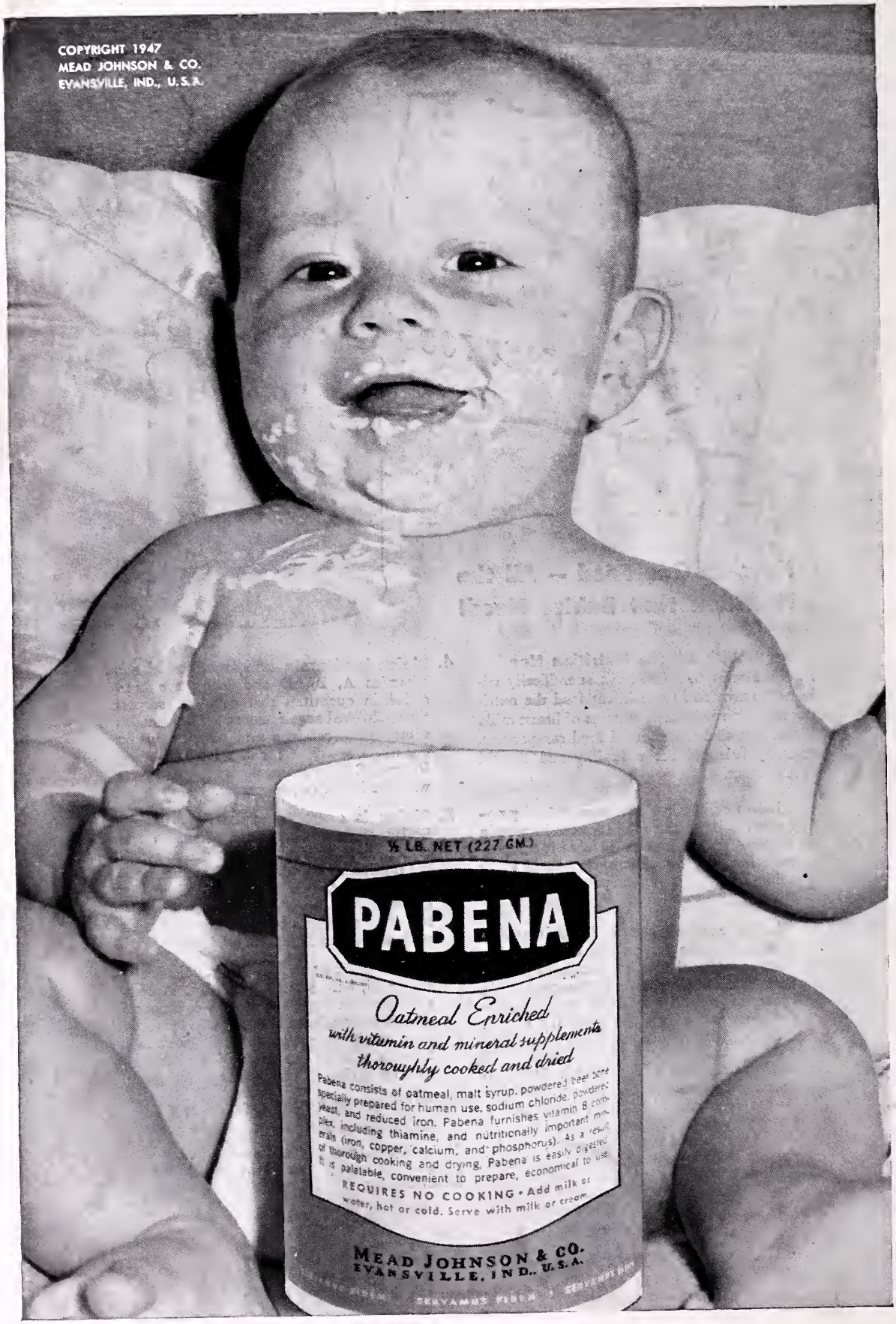
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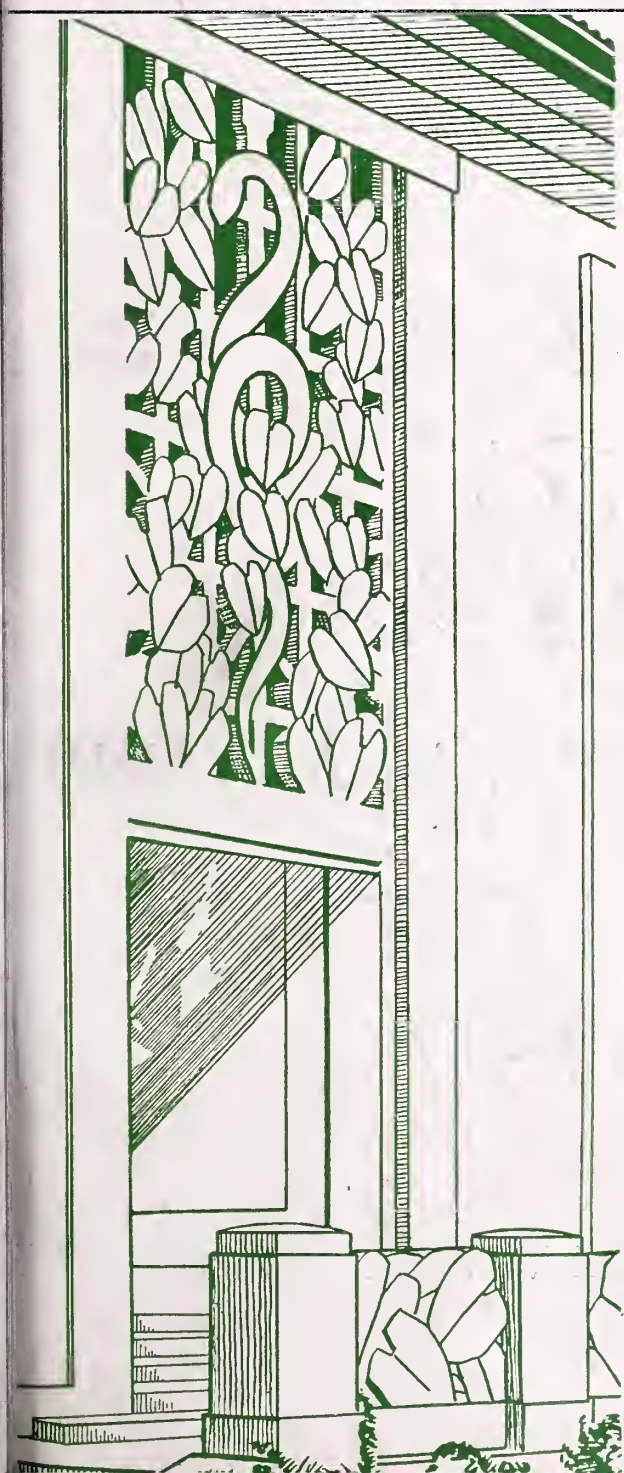
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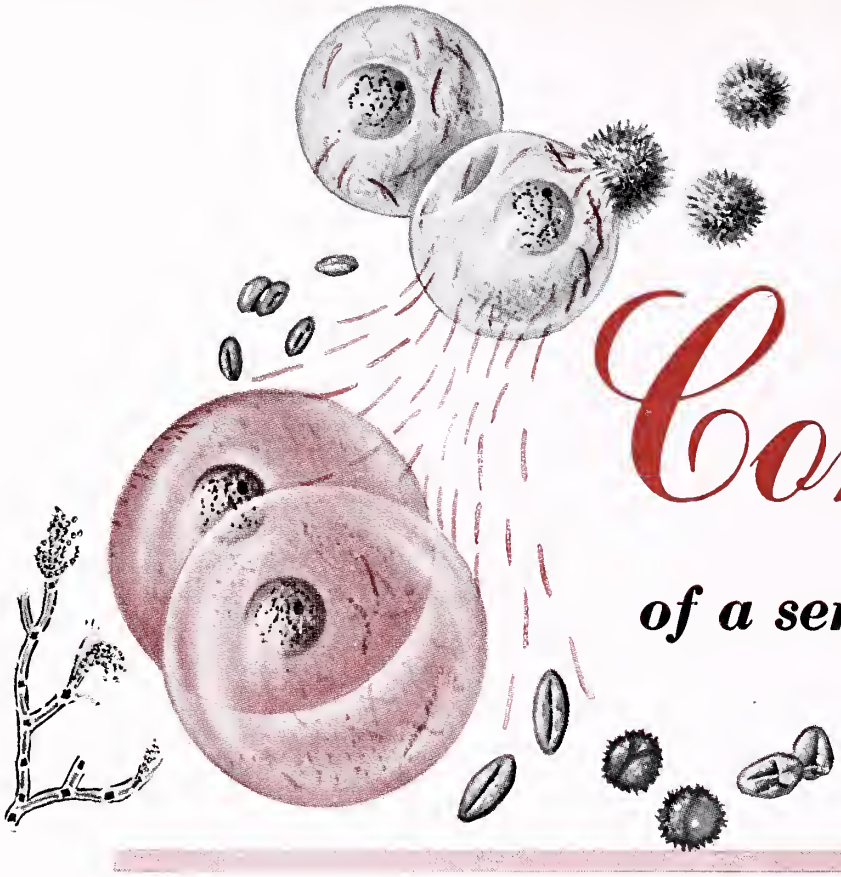
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PROTEIN	32 Gm.	VITAMIN B_1	1.16 mg.
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BIBLIOGRAPHY: 1. Brown, E. A.: Ann. Allergy 6:393, 1948. 2. Wittich, F. W.: Ann. Allergy 6:497, 1948.

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(1) Joslin, E. P.: Postgraduate Med. 4:302 (Oct.) 1948. (2) Kemper, C. F.: Rocky Mountain M. J. 45:1092 (Dec.) 1948. (3) Pollack, H.: New York Med. 4:15 (Dec. 5) 1948.

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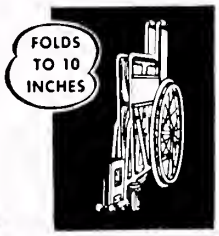
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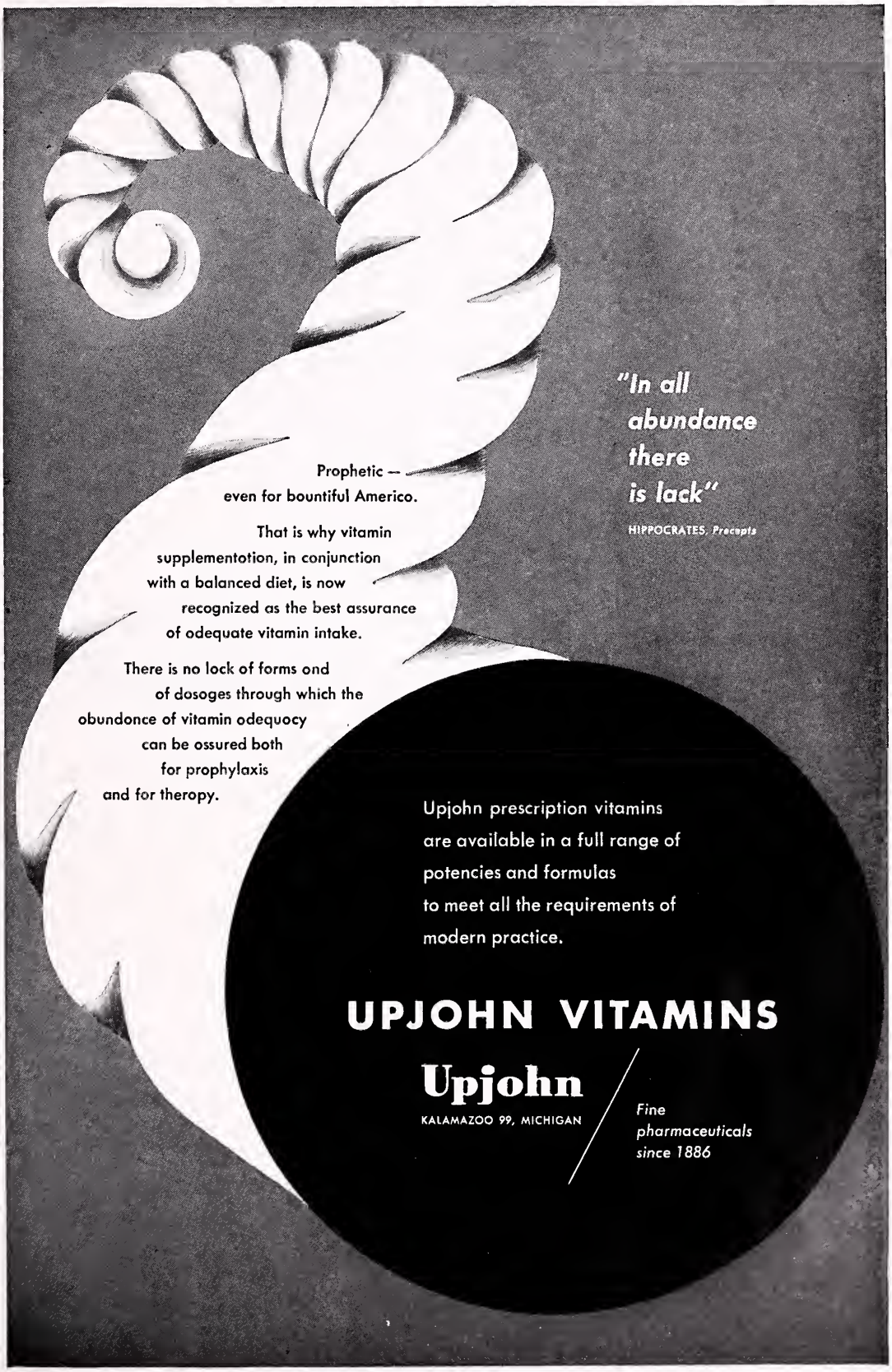
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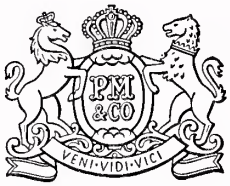

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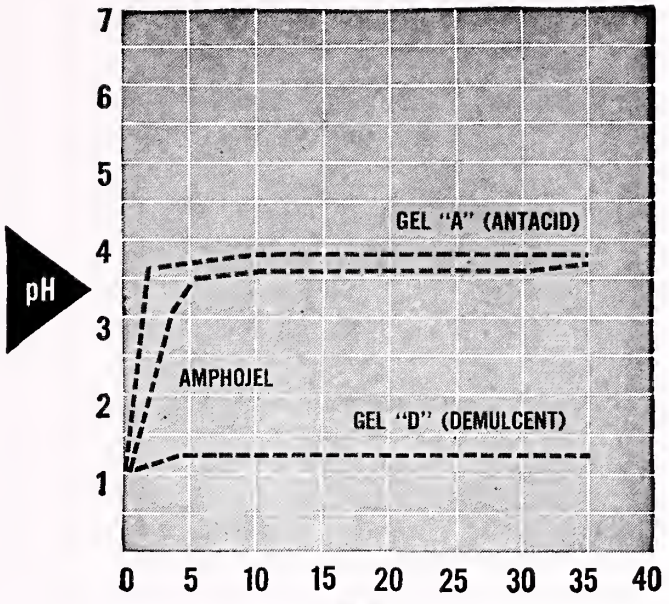
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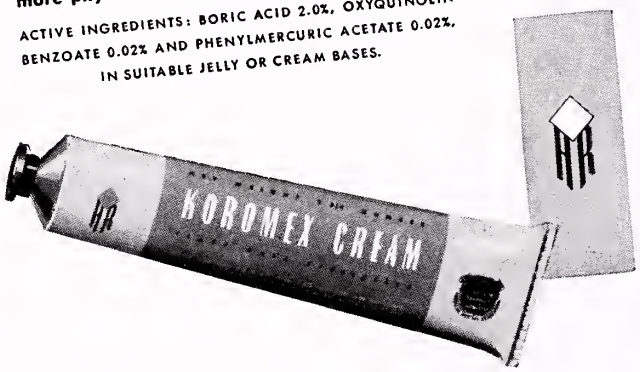


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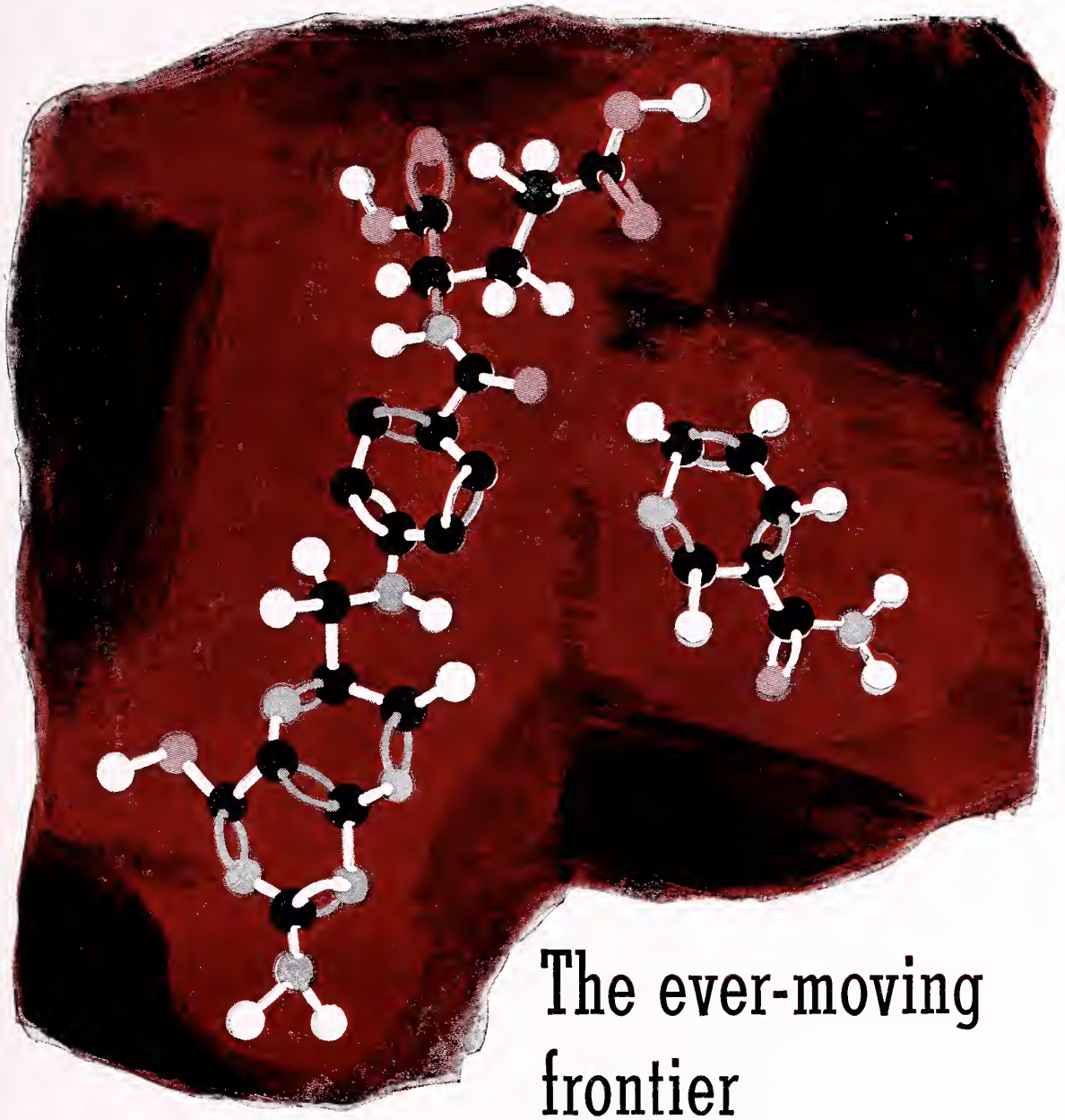
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Racial Incidence of Mental Disease in Hawaii

BRYANT WEDGE, M.D., and SHIZU ABE, M.S.*
HONOLULU

COMPARISON of disease rates among races is ordinarily difficult because of variations in clinical facilities, diagnostic criteria and professional qualifications in different geographic areas. The Territory of Hawaii affords unparalleled opportunities for making such comparative studies because the population is made up of several racial groups which are as yet relatively distinct. This study was undertaken to investigate the validity of a clinical impression that there are marked variations in the rate of mental illness between races in Hawaii.

Published reports concerning incidence of mental disease in various racial groups, particularly of the Oriental races, are few and scattered, and generally reflect clinical impressions rather than statistical facts. This study is a comparison of the racial incidence of mental disease in Hawaii carried out in the Psychiatric Division of The Queen's Hospital. This facility constitutes the only receiving hospital for psychiatric disorders in the Territory and as such admits a great majority of the mentally ill persons who receive hospital treatment. The statistics presented here are based on admissions to this facility over a period of one year and probably reflect with reasonable accuracy the true rates. The patients were all examined by members of the psychiatric staff, who used strictly comparable diagnostic criteria. The figures were derived from review of the clinical records and charts covering this period. The statements of the patient and his relatives of his racial extraction were made the basis for his racial classification. The racial distribution of the population is a 1947 estimate compiled by the Bureau of Vital Statistics, Territorial Board of Health.

During this year, 1947, there were a total of 1,103 admissions of 863 patients, a number being readmitted one or more times within the year. Though they were readmitted, they were counted only once. Of these, forty cases were rejected because of insufficient examination or lack of evidence of psychiatric disorder.

For the purpose of simplified classification, these cases were placed into four groups. Major reactions included schizophrenic psychoses, manic depressive psychoses, involutional psychoses and other psychoses not of organic origin. Minor reactions included psychoneuroses, psychopathic personalities, behavior disturbances and the like. Alcoholism[1] was classified separately because of the decidedly unbalanced racial distribution noted. The organic psychoses included central nervous system syphilis, senile and arteriosclerotic brain disease, post traumatic psychoses and psychoses due to infection.

The statistics have been compiled in Tables 1 and 2.

TABLE 1.—*Raw figures of 823 patients admitted to The Queen's Hospital Psychiatric Division in 1947 classified as to race and diagnostic group.*

1947 POPULATION [2]	RACE	ALL	ORGANIC	MINOR REACTIONS	ALCOHOLISM	MAJOR REACTIONS
77,843	Hawaiian and Part-Hawaiian	95	8	30	20	37
172,967	Caucasian	373	23	109	172	69
30,279	Chinese	23	5	4	0	14
171,983	Japanese	202	16	45	12	129
54,327	Filipino	74	8	16	2	48
9,546	Puerto Rican	21	5	7	6	3
7,216	Korean	17	1	3	4	9
1,314	Others	18	1	8	5	4
525,477	All	823	67	222	221	313

Table 1 presents the raw data on the 823 cases which were included in the study, grouped as to race and diagnostic classification.

TABLE 2.—*Rate of mental disorder per 100,000 population based on 823 patients admitted to The Queen's Hospital Psychiatric Division in 1947 classified as to race and diagnostic group.*

RACE	ALL	ORGANIC	MINOR REACTIONS	ALCOHOLISM	MAJOR REACTIONS
Hawaiian and Part-Hawaiian	122	10	38	25	47
Caucasian	215	13	63	99	40
Chinese	75	16	13	0	46
Japanese	117	9	26	7	76
Filipino	136	14	29	4	88
Puerto Rican	219	52	73	62	31
Korean	235	13	41	55	124
Others	1369	12	608	380	304
All	156	12	42	42	59

Table 2 presents the incidence of mental disease per 100,000 population as indicated by the study. The rates for the Puerto Rican, Korean and Others shown in the table probably present an exaggerated picture in relation to the other races because of the disproportionately small number of representatives of these groups in the total

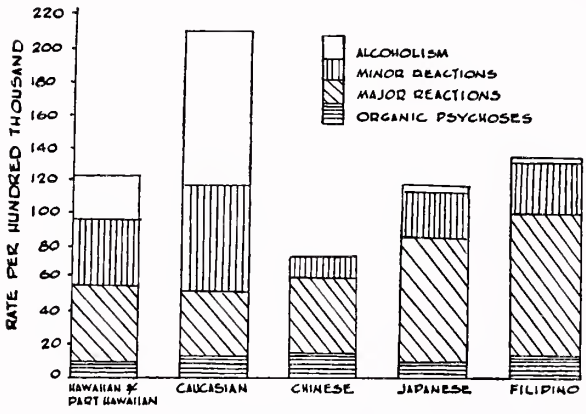
* M.S. in Social Work. Senior Medical Social Case Worker, Medical Social Service Association of Hawaii.

Received for publication, October 6, 1948.

[1] The policy of the Psychiatric Division of The Queen's Hospital states that only alcoholics with symptoms of mental disorder are to be admitted.

[2] 1947 estimates of total population based on the 1940 census of the United States Census Bureau.

population. For this reason these rates were not used for comparative purposes. The remaining figures in the table are illustrated in Graph 1.



GRAPH I.—*Rate of mental disorders per 100,000 population for selected races classified as to diagnostic groups.*

It will be noted that the rate of organic psychoses remains relatively constant in the groups illustrated.

The highest incidence of mental disorder reflected by these figures is found in the Caucasian group. This is heavily weighted by the markedly high incidence of alcoholism in this group which will be commented on below. The higher rate of minor reactions among the Caucasians may be accounted for by the number of psychopathic personalities found in the "floating" population attracted to Hawaii during and after the late war.[3]

The lowest over all rate of mental illness was noted among Chinese. The Chinese population is almost free of alcoholism.[4] The Chinese are a well established, economically secure population who have been in Hawaii for several generations. The fact that this is a socially stable group may account for the relatively low rate of minor reactions.

As noted above, and as demonstrated in a previous study at the Territorial Hospital,[5] alcoholism and its complications are almost entirely confined to the Caucasian and the Hawaiian and part-Hawaiian groups. This high incidence in the Caucasian group is partly due to the presence of an unstable "floating" Caucasian population as well as the wide use of alcohol in the American culture.[6] This cultural factor is accented by the almost negligible incidence of this disease in the three Oriental groups represented in the study. The occurrence of alcoholism in the Hawaiians and part-Hawaiians is probably a result of a small cultural base[7] which makes the natives easily vulnerable to the influence of the Caucasian immigrants.

The remarkably comparable incidence of major reactions among the Hawaiian and part-Hawaiian, the Caucasian and the Chinese racial groups is worthy of note. These segments of the population have resided in the predominantly American cultural atmosphere in Hawaii for a sufficient period of time to have arrived at a more stable adjustment than the more recent arrivals.

The much higher rate of major reactions in the Japanese and the Filipino groups could possibly be construed as a racial predisposition to these illnesses; however, these groups are more recent arrivals in Hawaii, representing first and second generation immigrants. They are still in the process of adjusting to cultural patterns which are radically different from their own. An additional factor operating in the Filipino group is the unbalanced sex ratio of about two males for every female. In each of these groups, the vast majority were schizophrenic illnesses occurring mostly in the second and third decades of life.

It is noteworthy that the rate of major illness indicated in this study shows a direct relationship to the duration of residence of each group in Hawaii; the Caucasian group showing the lowest and the recently arrived Filipino group showing the highest rate of major reactions. This is probably a manifestation of the relative social disorganization of the more recently arrived immigrant groups. If this hypothesis is correct, the rate of mental illness in the Japanese and the Filipinos may be expected to decline as they become more thoroughly assimilated to the culture of Hawaii which is relatively new to them.

[3] Population of Caucasians in 1940 was 103,791 and the 1947 estimate was 172,967.

[4] One psychiatrist in three years of practice has seen only three cases of alcoholism in Chinese in Hawaii.

[5] Kepner, R D.: Psychiatry in Relation to the Territorial Hospital, HAWAII MED. J. (Sept.-Oct.) 1943.

[6] Gorer, G.: The American People, New York, W. W. Norton & Co., 1940, p. 129.

[7] Fairchild, H. P.: Dictionary of Sociology (Philosophical Library of New York, 1944).

9819 Greenwood
Chicago, Illinois

Keratoconjunctivitis Due to Crownflower

WAYNE W. WONG, M.D.
HONOLULU

THE JUICE of the crownflower, *Calotropis gigantea,* is capable of causing a severe keratoconjunctivitis with a non-permanent reduction in vision. It is a well-known fact among residents of Hawaii that the milky juice of the crownflower can cause a serious skin burn.[1] The causative toxic chemical has not been identified, but its potent properties, even in small amounts, can be appreciated readily when one studies the effect of the juice on the human eye under the slit-lamp.

Crownflower is a member of the milkweed family, *Asclepiadaceae*. It is cultivated as a decorative plant and for its flowers in many homes. When the flowers are picked, the milky juice may spatter as the flower is snapped from its stem. In the cases to be reported, the juice entered the eye when an overhead flower was picked.

The juice of the crownflower is a milky white fluid of a pH of 5.0. It dries into a sticky resinous compound. When it is applied to the skin, it causes a burning, irritating sensation which lingers for a while, even after the area is washed with water. The area of contact becomes red. The chemical analysis of the juice has not been recorded, but it is known that all members of the milkweed family are poisonous, especially in the milky sap. Analysis of other members of this family[2] showed that the alcoholic extract of the juice contained substances which are capable of causing a constriction of the peripheral blood vessels, rise in blood pressure, diuresis, and contraction of smooth muscles. The toxic compounds are glucosides. According to *Merck Index,*[3] the poison is mudarin, a compound with the formula $C_{30}H_{48}O_2$, molecular weight of 440.37. It is a light brown amorphous mass which melts at 176°C. It is soluble in water and alcohol but insoluble in ether.

Clinical Course

The deposition of crownflower juice in an eye results in a severe reaction, even though the amount that actually enters the eye is relatively small. This speaks for the potency of the toxin. Immediately following exposure of the juice to the eye and the lids, there is a burning sensation of the eye and the lids which wears off in a few minutes, and the patient is comfortable. Six to twelve hours following this, there is a progressive diminution of vision which is due to corneal edema and the resultant folds in Descemet's membrane. These folds can be seen readily with an ophthalmoscope held a short distance from the eye while the red reflex of the fundus is obtained. By varying the distance of the ophthalmoscope from the eye, or adding more plus lens by turning the wheel on the ophthalmoscope, these folds and their relative size can be seen clearly. These are seen as wrinkles (Fig. 1). The corneal epithelium, at this time, is denuded in microscopic or macroscopic proportions, and the patient complains of a foreign body sensation. The accompanying ciliary congestion, together with the decrease in vision, is enough to cause the patient to seek medical aid. Visual improvement accompanies a decrease in the size and number of posterior corneal folds. No apparent ocular damage is noted following such an accident, as there is no slit-lamp evidence of damage in the anterior segment of the eye.

Case Histories

CASE 1. A 12-year-old girl was seen twenty-four hours after some crownflower juice splashed into her right eye. There was an immediate burning and smarting of the eye which lasted for about an hour. The eye became injected, and vision was blurred. Since the initial burning and smarting, the patient had been relatively comfortable, but she now complained of blurred vision in the right eye. Examination revealed that the right vision was 20/70 and the left vision was 20/20. The right eye revealed a 3 plus bulbar injection with no conjunctival secretion. The cornea was mucky and showed no gross staining (a slit-lamp was not available at this time). The anterior chamber appeared cloudy, obscuring a clear view of the iris. The pupil was constricted to 2-3 mm. and reacted sluggishly to light. The red reflex was good, and the folds in Descemet's membrane could be seen (Fig. 1a) but fundus detail could not be made out because of corneal clouding. Tactile tension was normal and equal. One percent atropine sulfate was instilled in the right eye. When the patient was seen 5 hours later, the pupil was adequately dilated. The anterior chamber was deep, the red reflex was good, and the fundus detail could be seen and was normal. When seen the following day, the bulb was paling and the cornea appeared clearer. Right vision returned to normal 5 days after the accident.

Received for publication, April 1, 1949.

[1] Arnold, H. L., *Poisonous Plants of Hawaii,* Tongg Publishing Company, Honolulu, T. H., 1944.

[2] United States Department of Agriculture: Bulletin No. 800, June 1920, The Whorled Milkweed (Asclepias glioides) as a Poisonous Plant.

[3] The Merck Index (Fifth Edition), Merck & Co., Inc., Rahway, New Jersey, 1940.

CASE 2. A 40-year-old woman had some crownflower juice splashed into her left eye twenty-eight hours previously. There was much irritation and burning of the left eye, and vision was blurred soon afterwards. There was a continued foreign body sensation and burning of the left eye so that she had had a poor night. Examination revealed her right vision to be 20/30 and her left vision 20/200 blurred. The left eyelids showed a small amount of irritant dermatitis with marked blepharoptosis. The bulbar conjunctiva on the temporal sector showed a two plus injection of the vessels. The cornea was clear and showed no gross staining; the anterior chamber was clear and shallow; the pupil was dilated about 2-3 mm. and reacted to light rather sluggishly. One percent homatropine was instilled in the left eye, and with the pupil dilated 5 mm. the left vision was improved to 20/60. Under the slit-lamp, the cornea of the left eye revealed numerous punctate staining areas evenly distributed over the entire cornea. The corneal stroma appeared thicker than normal and Descemet's membrane was thrown into numerous irregular folds (Fig. 1b). There were no posterior corneal deposits; no aqueous beam was noted. The iris appeared clean. The lens surface was free of any cellular deposits.

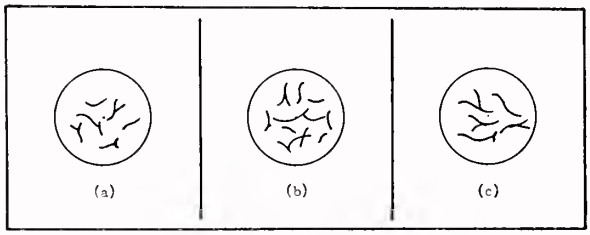


FIG. 1. Sketches of the posterior corneal folds as seen with an ophthalmoscope held a short distance from the eye.

Tonometric readings with the Shioetz tonometer revealed the right eye to have a pressure of 12 mm. and the left eye 17 mm. of Hg with a corresponding pupillary size of 3 mm. for the right eye and 7 mm. for the left eye. The patient was seen on the following morning. She experienced much pain in the left eye, which was of such severity that she had not slept at all. Tactile tension revealed the left eye to be harder than the right eye, and tonometric readings with a Shioetz tonometer revealed the right eye to be 19 mm. and the left eye 65 mm. of Hg with a pupillary size of 3 mm. for the right and 7 mm. for the left eye. She was placed on 2% eserine sulfate every 10 minutes. The tension became normal in two hours and left vision was 20/50. No further medication was used. Seven days after the accident the vision was 20/30. The posterior corneal surface still showed residual post-edematous striations. (She was refracted 5 months later by another physician, who used homatropine, and a glaucomatous attack was precipitated which was again controlled by miotics.)

CASE 3. A 44-year-old woman had some crownflower juice splashed into her right eye fifteen hours previously. Examination revealed her right vision to be 20/200 and her left vision 20/20. The right eyelids showed a mild irritant dermatitis of both lid margins. Bulbar conjunctival vessels were injected about two plus. The cornea appeared mucky and stained superficially in small scattered areas. Descemet's membrane was thrown into numerous irregular folds (Fig. 1c). The anterior chamber appeared clear, and the red reflex of the fundus appeared normal. Tactile tension was equal and normal. She was placed on a local ophthalmic anesthetic ointment. When she was seen two days later, vision in each eye was 20/20 in spite of the fact that the folds in the posterior corneal surface were still present but of diminished quantity. Since this accident, the patient has noted colored rings about lights when seen with her right eye. When she was seen ten days after the accident, the posterior corneal striations were almost completely absent and colored rings about lights were no longer noted.

Experimental Studies

The clinical course of the immediate effect of the crownflower juice on the rabbit's cornea was studied. A drop of the juice of a freshly obtained crownflower plant was instilled into each eye of two rabbits. After five minutes, the eyes were stained with fluorescein and washed with saline. No gross staining was noted on the cornea, the translucency of the cornea was unimpaired, and the pupillary size was unaltered.

Immediately after this observation, a drop of U.S.P. glycerin was instilled into the left eye of each rabbit. Glycerine was used with the idea that its viscosity and absorptive properties might be able to stem and possibly neutralize the penetration of the toxic elements into the cornea and the anterior chamber. Ten minutes following the application of glycerine, both eyes were again stained with fluorescein and washed with saline. No gross difference was noted between the eyes that had glycerine instilled and the control eyes. The cornea of both eyes showed some surface changes, which appeared to take a faint stain. The transparency of the cornea, the anterior chamber, and the pupil were not changed.

One hour after the instillation of the crownflower juice, the cornea stained in all eyes but to varied degrees. It appears that glycerine made little difference, for in one eye where glycerine was instilled, the corneal staining was larger; whereas in the other rabbit, the glycerine instilled eye also showed evidence of staining, but to a lesser degree. There was a beginning loss of transparency of the cornea of all eyes. The pupillary size was not altered. In the eyes that had glycerine instilled, the palpebral fissure was slightly narrowed, and there appeared to be a reflex ptosis.

Approximately five hours later, the corneal clouding was more pronounced. Its loss of transparency had increased, and the pupillary size was reduced about half. Blepharoptosis of the eye in which glycerine was instilled was still evident.

Two other rabbits were used with the purpose of studying the late effect of crownflower juice on the cornea. The juice was instilled only in

the right eye of each rabbit. Three hours after instillation, the eye showed a two plus conjunctival injection. The cornea stained grossly over half its area while the unstained cornea appeared mucky, making the anterior chamber appear cloudy. The pupil was constricted to 2-3 mm., while the control pupil measured 8-9 mm. Six hours after the instillation of the juice, the eye findings were essentially the same except that the conjunctival sac contained a layer of whitish, stringy secretion. Twenty-four hours later the bulbar conjunctival injection was reduced, corneal staining was minimal, and the cornea was clear, with the pupil dilated to the same size as the control eye.

Discussion

It is apparent from the clinical and experimental observations that the milky juice or latex of the crownflower contains a powerful toxin which is able to denude the epithelium of the cornea and the conjunctiva, penetrate the cornea and cause an edema of the corneal substance which results in large folds in the posterior corneal surface. Whether the toxin acts directly or reflexly, there is, also, an accompanied miosis and congestion of the iris, with a probable increase in the protein content of the aqueous of the anterior chamber.

The marked reduction in vision in these patients is due primarily to a change in the refractive media by the edema of the cornea with large folds in the posterior corneal surface and, secondarily, to a change in the index of refraction of the aqueous in the anterior chamber and the reflex myopia due to direct or reflex ciliary spasm.

The poisonous properties of the juice do not depend on its pH of 5.0, for the juice of another non-milky plant (aloe) with a pH of 4.0 did not cause any reaction on the cornea. Apparently, washing the eye out even five minutes following the instillation of crownflower juice does not alter its harmful effect, for it appears that the toxins have already penetrated the corneal epithelial barrier in spite of no gross evidence of corneal epithelial loss as tested with fluorescein.

It was felt that the hygroscopic properties of U.S.P. glycerine might retard the corneal penetration of the toxins and thus afford a means of treatment. However, instillations of several drops of glycerine, even five minutes after the crownflower juice had been instilled into a rabbit's eye, showed no beneficial effect three hours later. However, since it has been shown in another member of the milkweed family that the poisonous properties are found in the alcoholic extract[2] of the milky sap, it is not likely that the use of glycerine would be able to affect these substances.

Treatment

Since there is no permanent ocular damage to an eye which has contact with crownflower juice, treatment is entirely symptomatic. The use of a bacteriostatic and anesthetic ophthalmic ointment will be sufficient to give comfort. If corneal denudation is marked, the added application of a tightly applied eye patch will give more comfort and possibly speed up healing by immobilization. If miosis and congestion of the iris are present the use of a mydriatic will help.

Summary and Conclusions

The accidental instillation of crownflower juice in the eye is capable of causing a severe keratoconjunctivitis with marked reaction in the anterior segment of the eye. There is an accompanying temporary visual impairment varying in duration from five to seven days. The penetration of the toxin is immediate and is not altered by aqueous irrigation or the action of glycerine U.S.P. even as early as five minutes following contact. There is apparently no permanent injury to the eye.

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The Cytologic Diagnosis of Cancer by the Smear Technic
II. Technical Methods

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IN A PREVIOUS communication the history, applications and future of the cytologic diagnosis of cancer by the smear technic were discussed by Quisenberry.[1] The present report is concerned with technical methods.

Preparation of Smears

Vaginal and Cervical Smears

Vaginal smears are prepared by aspirating secretion from the posterior fornix with blunt straight or curved pipettes 7 to 8 inches in length and 5/16 of an inch in diameter. Such pipettes can easily be made in the laboratory from glass tubing of the proper size, and can also be obtained commercially (Fig. 1). The aspirated material is

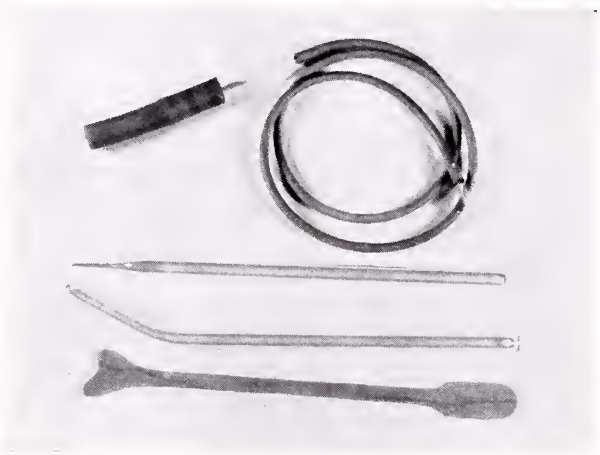


FIG. 1. Wooden spatula, straight and curved blunt pipettes, and rubber tube to provide suction.

blown onto a clean slide and spread out as uniformly as possible with the tip of the pipette until it covers most of the slide; the slide is then placed, while still wet, in the fixing solution. Douching by the patient prior to her visit to the doctor's office will wash away accumulated secretion and make the procedure virtually useless; the patient should therefore be advised not to take a douche for at least twenty-four hours before the examination. It is advisable to obtain the material before bimanual examination or the introduction of a vaginal speculum. Malignant cells from both adenocarcinomas of the fundus and squamous cell carcinomas of the cervix frequently appear in the vaginal fluid.

Cervical smears may be obtained by two different procedures. The cervical mucus may be aspirated from the endocervical canal with a pipette such as those used for obtaining vaginal secretion, or actual scraping of the squamo-columnar junction with a wooden spatula—the "surface biopsy" of Ayre—can be done. The cells of an adenocarcinoma of the fundus may be concentrated in the cervical mucus, while actual scraping of the squamo-columnar junction is probably the most reliable way of obtaining material in early carcinoma of the cervix. A wooden spatula made for this purpose can be purchased commercially or one can be easily made from a tongue blade (Fig. 1).

Sputum and Bronchial Secretion

The patient produces sputum by a cough following deep inspiration. The fresh specimen is spread out in a Petri dish over a dark background and blood-flecked particles or bits of material resembling tissue fragments are selected with a blunt forceps, smeared by several longitudinal "swipes" on a clean glass slide, and fixed immediately in ether-alcohol. The number of smears made from each specimen is limited only by the amount of technical help available, but it is ordinarily impractical to make more than two or three smears from each specimen. The procedure should be repeated several times, however, if there is a real suspicion of bronchogenic carcinoma.

Material aspirated from the bronchi during bronchoscopic examinations should be saved in the trap of the bronchoscope and sent to the laboratory immediately. The material is centrifuged, if necessary, and smears are made of the sediment, fixed and stained in the usual way.

According to Farber *et al.*[2] the examination of

* Prepared in conjunction with W. B. Quisenberry, M.D., Chief, Bureau of Venereal Diseases and Cancer Control, Territorial Dept. of Health, Honolulu.

[1] Quisenberry, W.: The Cytologic Diagnosis of Cancer by the Smear Technique: I. History, Applications and Future of Method, HAWAII M. J. 8:29 (Sept.-Oct.) 1948.

[2] Farber, S., Benioff, M., Frost, J., Rosenthal, M., and Tobias, G.: Cytologic Studies of Sputum and Bronchial Secretions in Primary Carcinoma of the Lung, Diseases of Chest, 14:633 (Sept.-Oct.) 1948.

sputum is just as reliable as the examination of bronchial aspirations in the diagnosis of bronchogenic carcinoma.

Gastric Secretion

It has been our custom to remove the fasting gastric contents and then to inject 30 cc. of normal saline. The patient changes his position several times, and the fluid is aspirated and reinjected in an effort to wash out the stomach as completely as possible. The material is then centrifuged at once in 50 cc. tubes, the supernatant fluid removed, and smears made of the sediment with a capillary pipette.

The fasting gastric contents may be handled in the same way, although some believe that washing the stomach as described above is a more reliable method of obtaining material. Graham *et al.*,[3] working with the fasting gastric secretion, found malignant cells in 15 of 24 cases of carcinoma of the stomach. It is possible that a larger amount of fluid—75 or 100 cc.—and more vigorous and prolonged washing would yield a higher percentage of positive results. Gastric material must be handled at once because the cells undergo rapid deterioration if the specimen is allowed to stand for any length of time.

This difficulty can be overcome by aspirating the gastric secretion directly into 95 per cent alcohol, or formalin, although it has been our experience that smears made from this type of material are less satisfactory than those made from the unfixed secretion. Such fixed sediments, however, can be readily embedded in paraffin, sectioned in the usual way, and stained with hematoxylin and eosin.

Urine Sediment

A fresh specimen of urine is obtained and the entire specimen is centrifuged at once in large tubes. Smears are made with a capillary pipette on clean slides coated with a film of egg albumin fixative, placed in the alcohol-ether fixative, and stained in the usual way.

Fixation

Almost any standard fixing solution can be used for this work, but the one devised by Papanicolaou,[4] consisting of equal parts of 95 per cent ethyl alcohol and ether, is probably the most satisfactory. Ten per cent formalin is unsatisfactory if the smears are to be stained by the Papanicolaou method, but works well if hematoxylin and eosin are used to stain the slides. Just why this ether-alcohol combination works so well is unknown; apparently it was arrived at by trial and error. The ether serves as a readily available diluent which may promote rapidity of fixation.

We have found it convenient to dispense the fixing solution in bakelite-top, screw-cap coplin jars. Such jars hold 5 slides, or 10 if they are placed back to back. It is also convenient to number the slides in the laboratory with a diamond point pencil, and to supply numbered slides and coplin jars of fixative to the various clinical departments. It is then a simple matter for the doctor preparing the smears to ask his nurse or technician to copy the number of the slides together with the patient's name and other pertinent information on a laboratory request slip. Each jar of fixative can be used at least five or six times before discarding, but must be filtered each time before use in order to remove debris which has dropped off the previous batch of slides.

The smears must be made on clean slides. Our nurses and technicians have been instructed to immerse each slide in the fixing solution and then wipe it dry with a clean cloth just before making the smear. After the smear has been prepared it should be dropped immediately while still wet into the fixing solution. Fixation takes place within thirty minutes or less, but the smears may be left in the solution for as long as two weeks without affecting the staining qualities of the cells.

Preparing Smears for Mailing

An inflammable ether-alcohol solution cannot be sent through the mail, but smears can be prepared and fixed as described above, and then covered with three or four drops of glycerin while still wet. A clean glass slide is applied as a cover slip and the preparation can then be mailed in the usual manner. Glycerin prevents the smears from drying, and will preserve the staining properties of the cells for two weeks or longer.

An alternative method suggested by Ayre[5] consists in aspirating the material to be examined directly into a test tube filled with the ether-alcohol fixative. After fixation the tube is centrifuged and all of the supernatant fluid removed except 1 or 2 cc. The tube, tightly stoppered, can then be mailed, but smears of such fixed material are relatively unsatisfactory, and it will usually be necessary for the processing laboratory to embed the sediment in paraffin.

[3] Graham, R. M., Ulfelder, H., and Green Jr., T. H.: The Cytologic Method as an Aid in the Diagnosis of Gastric Carcinoma, Surg. Gyn. & Obs. 86:257 (March) 1948.

[4] Papanicolaou, G. N., and Traut, H. F.: Diagnosis of Uterine Cancer by the Vaginal Smear, New York, The Commonwealth Fund, 1943, pp. 3, 6.

[5] Ayre, J. E.: Vaginal and Cervical Cytology in Uterine Cancer Diagnosis, Am. J. Obs. & Gyn. 51:3 (June) 1946.

Staining

The technic devised by Papanicolaou[6] is satisfactory.

Dyes Required

1. Hematoxylin. Harris' alum hematoxylin is satisfactory. Our best results have been achieved with aqueous alum hematoxylin prepared as suggested by Gates and Warren:[7]

Hematoxylin	1.0 Gm.
Ammonium or Potassium Alum	20.0 Gm.
Distilled Water	400.0 cc.
Thymol	1.0 Gm.

Dissolve the hematoxylin crystals with the aid of gentle heat in 100 cc. of distilled water and add to the alum which has been dissolved in 300 cc. of distilled water. Lightly stopper and allow to ripen for two weeks. It is then ready for staining and should be kept tightly stoppered.

2. OG 6.

Orange G—0.5% in 95% ethyl alcohol	100.0 cc.
Phosphotungstic Acid, Merck	0.015 Gm.

3. EA 36.

Light Green SF yellowish—0.5% in 95% ethyl alcohol	45.0 cc.
Bismarck Brown—0.5% in 95% ethyl alcohol	10.0 cc.
Eosin yellowish—0.5% in 95% ethyl alcohol	45.0 cc.
Phosphotungstic Acid, Merck	0.2 Gm.
Lithium Carbonate, saturated aqueous solution	1 drop

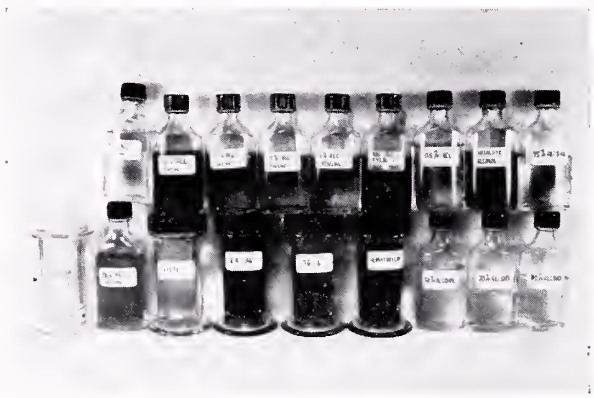


FIG. 2. Solutions necessary for staining smears by Papanicolaou's method.

Stock solutions of the dyes, 0.5% in 95% ethyl alcohol, are first prepared. Since the solubility of most of these dyes is low in 95% alcohol, it is recommended that 10% aqueous solutions be prepared first. A mixture of 5% of the aqueous 10% solution and 95% of absolute ethyl alcohol results in a 0.5% solution in 95% alcohol[7] and appears to give better solubility than if the dyes are made up directly in alcohol. Heat should be used in making the stock solutions in order to achieve the highest degree of solubility possible, but even with heat some of the dyes, especially the orange G, will not go completely into solution. The proper amounts of the stock solutions of the dyes are then combined with the aid of a graduate, each individual dye solution being filtered before mixing. It is not necessary to filter the final mixture.

[6] Papanicolaou, G. N.: A New Procedure for Staining Vaginal Smears, Science 95:438 (April 24) 1942.

[7] Gates, O., and Warren, S.: A Handbook for the Diagnosis of Cancer of the Uterus by the Use of Vaginal Smears, ed. 2, Harvard University Press, Cambridge, 1948, p. 18.

Both the orange G stain and the EA 36 combination are quite stable. Kept in airtight, screw-cap, coplin jars, they retain their staining activity for a long time. We have found that 50 cc. of each dye solution will stain from 80 to 100 smears with no apparent loss of activity.

Staining Schedule

1. Remove smears from the fixative and flood immediately while still wet with thin celloidin,[8] pouring the excess back into the bottle.
2. Allow to dry slightly and wipe off excess celloidin from the back of the slide and around the edge of the smear.
3. Dip smear 10 times in 80%, 70% and 50% ethyl alcohol (isopropanol can be substituted here) and then 10 dips in tap water.
4. Hematoxylin, 3 to 10 minutes.[9]
5. Ten dips in tap water and then dip 3 or 4 times in 0.5% aqueous solution of hydrochloric acid.
6. Rinse in tap water and allow to stand in water containing a drop or two of saturated solution of lithium carbonate until blue.
7. Dip 10 times in 50%, 70%, 80% and 95% ethyl alcohol or isopropanol (use the same alcohols as in step 3).
8. Stain 1 to 2 minutes in OG 6.
9. Dip 10 times in three separate solutions of 95% ethyl alcohol.[10]
10. Stain in EA 36 two minutes.
11. Dip 10 times in three separate solutions of 95% ethyl alcohol.
12. Absolute alcohol fifteen to thirty seconds.
13. Absolute alcohol and xylol, equal parts.
14. Blot gently with fine bibulous paper.
15. Clear in xylol and mount in gum dammar.

General Principles

The various solutions used in the staining technic described above can be conveniently stored in a series of ordinary medicine bottles with air-tight screw caps (Fig. 2). The three dye solutions are kept in air-tight, screw-cap coplin jars. Processing is carried out in an empty coplin jar, pouring the various solutions in and out by means of a funnel. The slides are transferred in and out of the dye solutions with untoothed forceps. This method of processing the smears saves space and conserves time, and is also advantageous because all of the solutions are kept tightly stoppered, thus preventing evaporation. The same system can be employed with larger staining dishes and trays, but larger bottles and larger amounts of solution will of course be required.

Cancer diagnosis depends almost wholly upon nuclear changes and it is therefore of fundamental importance to achieve precise nuclear staining. The hematoxylin must be properly prepared, and the staining and decolorizing time for each batch adjusted so that nuclear structures are sharply and precisely stained. Counterstaining with the cytoplasmic stains OG 6 and EA 36

[8] This step has been added to the technic by the author and has proved extremely valuable. The thin film of celloidin over the smear does not interfere with staining in any way, and prevents material from dropping off the slide during the staining process. To prepare thin celloidin, dissolve 10 gms. of dry celloidin in 150 cc. of equal parts of ether and absolute ethyl alcohol. Add 10 cc. of this thick celloidin to 190 cc. of equal parts of ether and absolute ethyl alcohol.

[9] The optimum time for hematoxylin staining varies with each batch of the dye, and must be determined by trial and error, and adjusted from time to time.

[10] Isopropanol cannot be substituted for ethyl alcohol here without affecting the staining of the cells.

adds very little in cancer diagnosis, but it does add something, particularly in squamous cell carcinomas, because keratinized cells can be sharply distinguished from those of the non-keratinized type.

Discussion

It should be emphasized that one is not limited to smears in examining body secretions for malignant cells. Hunter and Richardson[11] have devised several valuable embedding and staining methods for the examination of sputum, gastric washings, vaginal secretion and other body fluids involving fixation in 10 per cent formalin and precipitation of mucus in saturated aqueous picric acid, followed by paraffin embedding. Ideally one would first make smears for Papanicolaou staining, and then embed the remaining material in paraffin, but practically this may be impossible because of the amount of time and effort involved. It therefore becomes necessary to select the technic which seems most appropriate for the specimen at hand.

Interpretation of the stained smears is by no means an easy task and requires considerable training and experience. A pathologist skilled in tissue diagnosis is not necessarily a good cytologist, although his knowledge of cells gives him a good background on which to base the necessary training. If the smears are examined properly, every portion of the slide is looked at under medium power, preferably with 12.5 or 15X wide-angle oculars, by crossing back and forth across the slide with the aid of a mechanical stage. Each suspicious cell or cell group is marked with ink, and then examined more carefully under higher magnification. Screening one slide in this manner takes ten minutes or longer, and it is therefore necessary to train technicians to do this screening work.

The basic facts on which the cytologic diagnosis of cancer rests are (1) that the majority of carcinomas, even in their earliest stages, exfoliate cells into the body fluids which come in contact with them and (2) that such cells can be recognized as malignant by trained persons with the aid of appropriate technics.

[11] Hunter, W. C., and Richardson, H. L.: Cytologic Recognition of Cancer in Exfoliated Material from Various Sources, Surg. Gyn. & Obst. 85:275 (Sept.) 1947.

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Multiple Transfusions in Chronic Lymphatic Leukemia

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FOR THE PAST two years, detailed records have been kept at the Blood Bank of Hawaii on a case of chronic lymphatic leukemia, complicated by a hemolytic process. The purpose of this paper is to present the laboratory findings (determined from blood counts, differential counts, hemoglobin determinations, platelet counts, selective agglutination tests, tests for iso-antibodies and urine tests) and enough of the case history to make these intelligible.

Case Report

Mrs. W., a Caucasian woman 73 years of age, was of blood type OMNRh$_2$. On December 3, 1945, she was admitted to The Queen's Hospital with a diagnosis of pneumonia. A blood count done on December 3 gave the following picture:

Hemoglobin	9.5 gm.
R.B.C.	3,150,000
W.B.C.	71,850
Neutrophilic granulocytes	30
Lymphocytes	68
Monocytes	2

Penicillin therapy was started immediately and on December 4, 500 cc. of banked blood was given. The final diagnosis was lobar pneumonia and chronic lymphatic leukemia. A blood count done December 7 gave the following:

Hemoglobin	11.00 gm.
R.B.C. 4,010,000 sl. anisocytosis and polychromasia	
W.B.C.	36,350
Neutrophilic granulocytes	5
Lymphocytes	94
Eosinophilic granulocytes	1

A heterophil agglutination test was negative. The patient was dismissed December 10, 1945.

The patient was readmitted to the hospital August 8, 1946, for transfusion, since oral administration of ferrated liver had failed to maintain her red cell count. Outside of a cross-match no other laboratory work was done.

The third admission was on January 1, 1947, with a diagnosis of acute tonsillitis and chronic lymphatic leukemia. The patient had suffered an ear and throat infection with loss of hearing in December of 1946. She was given penicillin intramuscularly and supportive therapy which included 500 cc. of whole banked blood on January 6, 1947.

On April 9, 1947, the patient was sent by Dr. Berk to the Blood Bank for transfusion there. She was given 1000 cc. of whole blood. At this time her pre-transfusion blood count showed hemoglobin of 42%, red cell count of 2,280,000 and 52,000 white cells of which 96% were lymphocytes. Following this she received six units of blood during the next two months. Her condition was good, except for her mild anemia. Transfusions were effective in that the hemoglobin level and the red cell count were adequately raised and maintained themselves.

During the months of July and August 1947 there was an increased need for transfusions. In June she had started having mild reactions and in July had had a chill followed by a rise in temperature to 102.6 F. At this time it was decided to give her red blood cell suspensions rather than whole blood, to remove any irregular agglutinins which might be present in the donor plasma. During August the patient received seven units of red blood cell suspensions in 5 per cent dextrose in saline.

Early in September it became necessary to transfuse her every other day. Her hemoglobin content dropped as low as 20% and her red cell count to 1,320,000. The leucocyte count fluctuated from about 15,000 to 20,000. The patient's physical condition was such that she was admitted to The Queen's Hospital and permission was granted to the Blood Bank physician to transfuse her there. She received two red blood cell transfusions. Since that time all transfusions have been given at the Blood Bank of Hawaii. She received 13 transfusions of whole blood in September and 26 during October. It was apparent that a hemolytic state had developed which was destroying the red cells almost as rapidly as they were infused. The serum was markedly icteric, and her red cell count would drop a million to a million and a half in forty-eight hours. The transfusions given in September were not followed by any reactions despite the fact that the cross-matches showed some clumping on the minor side in conglutination tests.

In November she received 24 transfusions and in December, 22, the red cell count being just maintained at a level of about 2,000,000. On December 24, 1947, she had a mild reaction, feeling chilly for five minutes, with her temperature rising to 99.6° F. She had two more mild reactions at about the same time, and it was thought that these might be due to using too fresh blood. An attempt had been made to give her blood not more than twenty-four hours old, hoping to provide her with more resistant cells. When these mild reactions began, bloods three or more days old were used and these were accepted without reactions.

In January, 1948, her condition began to improve; 15 transfusions were needed to keep her comfortable and to maintain her hemoglobin content close to 10.0 grams and her count about three million red cells. The leucocyte count gradually decreased to a level around 12,000. She received but one unit of blood at a time rather than two as had previously been necessary.

During February and March 1948, she received 11 units of blood each month, and nine in April. Since that time she has received 36 more transfusions. On March 21, 1949, her pre-transfusion count showed hemoglobin to be 8.2 grams, red blood cells 2,640,000, white cells 8,450 and the post-transfusion count showed hemoglobin 8.4 g., red cells 3,440,000, white cells 11,500. Her physical condition is good. She manages her own cooking and housework and goes to the movies now and then. Her hearing has greatly improved.

Laboratory Work Done

Altogether Mrs. W. has received 191 units of blood in transfusions as of April 1, 1949. Of

these 16 were of red blood cells only and the rest of whole blood. In almost every case a pre- and post-transfusion count of both red and white cells were made as well as hemoglobin determinations (Sahli and Klett Hemoglobinometers) before and after transfusions. Numerous differential counts have been done.

A pre- and post-transfusion record of the platelet count was kept from September 15, 1948, through November 27, 1948, and is now again being kept.

At the time the hemolytic process was the most acute, a developing test was run to determine if iso-antibodies were involved.

Two selective agglutination tests were performed in December, 1948, and January, 1949, to determine the survival of transfused cells.

Since it was feared that a condition of hemochromatosis might result due to the multiple transfusions this patient has received, an urobilin test and an urobilinogen test were performed on March 21, 1949.

Over-all Blood Picture

1. Comparison of Pre- and Post-Transfusion Counts (See Table 1).

TABLE 1: *Comparison of Pre- and Post-Transfusion Blood Picture.*

BLOOD ELEMENT	INCREASE	DECREASE	NO CHANGE
Hgb—%			
Total Transfusions	124=94.7%	4=3.1%	3=2.2%
1-10	77	4	3
11-20	38	0	0
21 and over	9	0	0
RBC			
Total Transfusions	126=96.18%	5=3.82%	0*
10,000-500,000	67	4	0
500,001-1,000,000	42	1	0
1,000,001-2,000,000	17	0	0
WBC			
Total Transfusions	80=61.0%	50=39.0%	1=0.9%
100-1,000	30	14	1
1,001-10,000	48	32	0
10,001 and over	2	4	0

* Note: There was no RBC count available in one of the transfusions.

Of 131 hemoglobins in grams per cent determined over the two year period, comparisons between the pre- and post-transfusion counts show that 124 (94 per cent) showed an increase, 4 (3.1 per cent) showed a decrease and 3 (2.2 per cent) showed no change.

Of 131 red cell counts done during the same period comparisons between the pre- and post-transfusion counts show that 126 (96.2 per cent) showed an increase following transfusion and 5 (3.8 per cent) showed a decrease.

The decreases in the red blood cell count noted occurred mainly during September and October of 1947 (See Table 1) when the hemolytic process was at its height, four occurring during that time.

There has not always been a correlation between the drop in the red blood cell count and the hemoglobin determinations. In general, however, any variations were the exception rather than the rule.

Of 131 W.B.C. counts done over the same period 80 (61 per cent) showed an increase following transfusion and 50 (39 per cent) a decrease; one showed no change.

The increase or decrease in the white cell count following transfusion has not been nearly so stable (See tables 1 and 2). In general the white count

TABLE 2: *Effect on Blood Picture of Transfusion with Fresh Blood and Blood Stored for Varying Periods.*

BLOOD ELEMENT	*No. Transfusions*	*Increase*	*Decrease*	*No Change*
	FRESH BLOOD			
Hgb	4	4	0	0
RBC	4	4	0	0
WBC	3	3	0	0
	BLOOD 1-10 DAYS OLD			
	No. Transfusions	*Increase*	*Decrease*	*No Change*
Hgb	117	110	4	3
RBC	113	107	6	0
WBC	113	65	47	1
	BLOOD 11-20 DAYS OLD			
	No. Transfusions	*Increase*	*Decrease*	*No Change*
Hgb	10	10	0	0
RBC	15	15	0	0
WBC	15	13	2	0

seems to have increased temporarily immediately after transfusion. However, the overall picture shows a steady decline in W.B.C. from 47,000 in April 1947 to 8,450 at the present time.

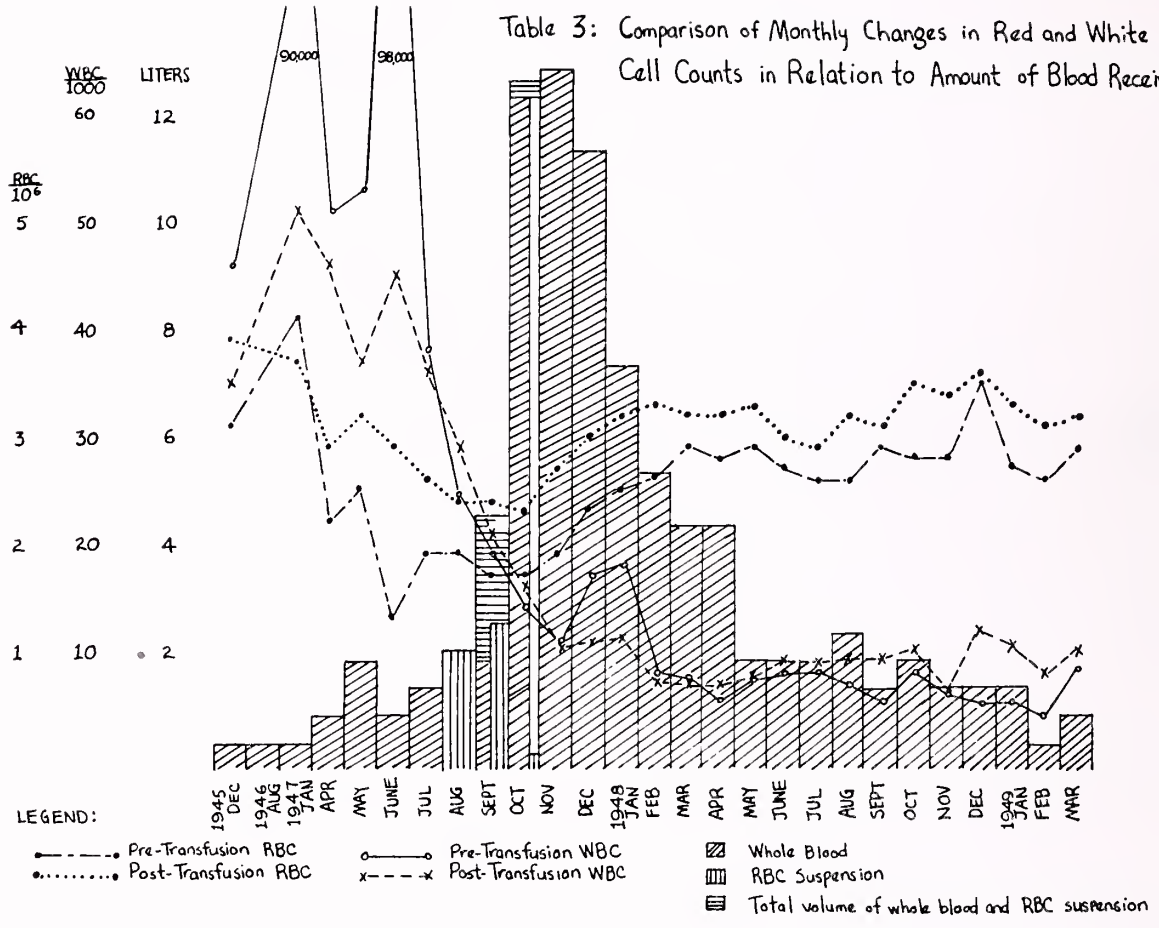
For a comparison of average monthly changes in the white and red cell counts in relation to amount of blood received see accompanying chart (Table 3).

2. The differential count has shown an improvement in the blood picture. At one time in December, 1945, the lymphocyte count ran as high as 94 per cent. Her more recent counts vary from 60-80 per cent lymphocytes with a corresponding increase in neutrophilic granulocytes. Her most recent blood smear shows poikilocytosis, anisocytosis and hypochromia of the red cells. The red cells are slightly smaller than normal. Reticulocytes were never present to the extent they have been reported in other cases.[1] The latest count gave a count of 0.9 per cent.

3. Effect of Age of Transfused Blood on General Blood Picture (See Table 2). The age of blood given in transfusion seems to have very little to do with the resulting blood picture. Generally speaking, an increase in hemoglobin and red and white cells was observed following transfusion regardless of the age of the blood. At one time the patient had a minor pyrogenic reaction following administration of one-day-old blood

[1] Stats, D., Rosenthal, N. and Wasserman, L. R.: Hemolytic Anemia Associated with Malignant Diseases, Am. J. Clin. Path. 17: 585 (Aug.) 1947.

Table 3: Comparison of Monthly Changes in Red and White Cell Counts in Relation to Amount of Blood Received



and her previous record showed that other reactions had followed the use of one or two-day-old blood. Bloods three or four days old and older were well taken.

Pre- and post-transfusion indirect platelet counts were done on this patient from September 15 through November 27, 1948, covering ten transfusions. They showed an increase of platelets seven times following transfusion and a decrease three times. During this period bloods from 5 to 13 days old were used. *There is no apparent relation, within these limits, between the age of the blood and the effect on the platelet count.* We found this to be true also in work done on another case at the Blood Bank covering twelve transfusions in which strictly fresh bloods were used in comparison with older bloods.

4. Survival of Transfused Cells: Two experiments to determine the duration of cell survival in the recipient after transfusion were performed in December, 1948, and January, 1949.[2] Since the patient is an Rh_2-positive, the donor chosen was an Rh-negative. By agglutinating the Rh-positive cells with anti-Rho serum and counting the unagglutinated cells, the amount of Rh-negative blood cells left in the recipient's circulation were evaluated. The cell survival time was only six days. The donor cells apparently were rapidly removed from the circulation, though the patient's own cells were not being destroyed as rapidly as previously. The patient's count is still decreasing about 500,000 red cells between transfusions. The infused cells apparently are removed within seven days and if her own cells were being destroyed as rapidly she would need transfusions at more frequent intervals than, as now, 18 to 19 days.

Tests for Iso-Antibodies

The question arose during the height of the hemolytic process, and can still be asked, as to what causes the destruction of the red blood cells. Attempts were made to demonstrate iso-hemolysins or irregular agglutinins in the serum of the patient but without sucess. Wiener's new direct

[2] Osborne, Dorothy E. & Denstedt, Orville F.: Estimation of Cell Survival After Transfusion by Selective Agglutination, J. Clin. Invest. 26: 655 (July) 1947.

test,[3] whereby one part of albumin is added to four parts of the plasma to be tested, was used. In the test, such fortified patient's plasma was incubated for three hours with her own cells, and with other O cells in suspension for a control. Neither her own cells nor the control cells hemolyzed. We then washed the cells with saline to remove all adherent serum proteins, and subjected them to Coomb's test[4] in order to ascertain if any globulin antibodies had been attached to the surface of the cells. This test was also negative.

Tests to Determine Extent of Hemochromatosis

Due to the great number of transfusions this patient has received, plus the great destruction of red blood cells which has occurred, some injury to the liver and kidneys due to deposition of iron must have occurred. During September and October of 1947, when the hemolytic process was at its height, the serum of the patient was markedly icteric, the skin bronzed and the patient complained of severe pain in the splenic area. At that time there was no evidence of urinary suppression or nephritis. Tests performed on March 21, 1949, gave the following results:

Bilirubin Test:
- Van den Bergh direct test: negative
- Van den Bergh indirect test: 0.5 mg/100 cc. blood (normal—0.25 mg. %)

Urinalysis:
- pH 6.5
- color—amber
- albumin—negative
- urobilin—one plus
- urobilinogen—negative in 1:10
- microscopic study:
  - calcium oxalate crystals—moderate
  - amorphous urates—moderate
  - white blood cells—15-20/hpf
  - red blood cells—2-3/hpf
  - epithelial cells—occasional

Other tests performed at this time gave the following results:
- Reticulocyte count: 0.9% (normal—anything below 2%)
- Fragility Test:
  - 0.45% saline—20% hemolysis
  - 0.38% saline—89% hemolysis
- Normals[5]
  - 20-50% hemolysis
  - 75-95% hemolysis
- Heparinized specimen incubated at 37° C. for one hour—no hemolysis
- Patient's serum plus O cells in saline—no agglutination
- Patient's serum plus O cells in plasma—no agglutination
- Patient's serum plus O cells in fortified plasma—no agglutination

Patient's Serum Protein:	Normals:
Total protein—3.8 gm. %	6.0-8.0 gm. %
Albumin—2.6 gm. %	4.0-5.5 gm. %
Globulin—1.2 gm. %	1.4-3.0 gm. %

Summary

The Blood Bank of Hawaii has followed a case of chronic lymphatic leukemia from 1945 up to the present time. Since April, 1947, this patient has received regular transfusions at the Blood Bank. The severe hemolytic process which complicated the leukemia was held in check by multiple transfusions until it became inactive. It was felt that the multiple transfusions may have caused hemochromatosis but we have been unable to demonstrate this. The chronic lymphatic leukemia has apparently either become quiescent or has become aleukemic.

From the multiple transfusions given to this patient we have learned that an individual with this type of disease may be able to tolerate a great number of transfusions without apparent permanent damage to the reticulo-endothelial system. Certainly at one time the transfusions were the only thing which kept the patient alive.

Also of interest is the fact that the age of transfused blood within its expiration limits has nothing to do with the resultant blood picture.

[3] Wiener, A. S. & Hurst, J. G.: A New Test (Direct Test) for Rh Blocking Antibodies, Exper. Med. & Surg. 5: 285 (May-Aug.) 1947.

[4] Hill, J. M. and Haberman, Sol.: Demonstration of Rh Antibodies in the Newborn and Further Evidence of the Pathogenesis of Erythroblastosis, J. Lab. and Clin. Med. 31: 1053 (Oct.) 1946.

[5] Fennel, Eric: Personal communication.

NOTE: Detailed charts are available on file at the Blood Bank of Hawaii.

Paratyphoid A Fever

First Proven Case in Hawaii

WILLIAM O. FRENCH, M.D., and PETER KIM, M.D.
HONOLULU

THIS is the first proven case of paratyphoid A fever in the Territory of Hawaii. The microorganism was isolated by blood culture and identified by antigenic and biochemical analysis. This incidence demonstrates again that the history of a recent immunization with the typhoid-paratyphoid vaccine, often referred to as "triple typhoid" and as "T.A.B." vaccine, offers little assurance that the disease is not typhoid or paratyphoid A.[1] Immunization merely makes the diagnosis a little more difficult by modifying the disease or causing an atypical Widal. The present case received the T.A.B. vaccine in 1941 and a booster dose in 1944.

There have been many studies made on the controversial question of cross-immunization between the members of the typhoid-paratyphoid group of microorganisms.[2] In individuals vaccinated with the T.A.B. vaccine, significant amounts of protective substances against the heterologous types of Salmonella have been found. The T.A.B. vaccine is at present considered to be an effective immunizing agent against certain types of Salmonella, but not against the paratyphoid C group.[3] The present T.A.B. vaccine does not ordinarily include the group C Salmonella. However, it probably offers a little protection against an overwhelming infection.

It has also been shown by these investigators that when active immunization with the monovalent typhoid vaccine is given, there is only a questionable cross-immunization to S. schottmuellerli (paratyphoid B). Immunity induced by each of the three components of the T.A.B. vaccine seems not only specific but relative.

Etiology

Salmonella paratyphi A was isolated from enteric fever in man around 1898. It is the causative agent of enteric fevers, but not of acute gastro-enteritis in man. It is a gram-negative, non-sporing rod and belongs in the Salmonella group, of which there are now over 130 specifically named serologic types.[3] There are three different species commonly recognized as the cause of paratyphoid fever: S. paratyphi A, S. paratyphi B, and S. paratyphi C.

In our case the microorganism was isolated by blood culture and identified as being characteristic of paratyphoid A by biochemical studies and by the positive agglutinations with paratyphi antiserum which corresponds to the antigenic formula of Group A.

Symptomatology

Paratyphoid infections are defined as acute febrile diseases characterized by bacteremia. Paratyphoid fever, especially that due to paratyphi A, is clinically so similar to typhoid fever that a bacteriologic diagnosis must be made to differentiate the two diseases.

In as high as 85 per cent of the reported cases the onset of the illness has been gradual.[5] The fever is usually the single outstanding manifestation of the disease, but there is no typical fever curve. Syverton *et al.* found in their series that the average duration of fever was 33 days. However, there have been cases where the fever was known to have lasted as long as 99 days. In our case, the fever lasted for 40 days. There was an occasional low grade fever throughout the illness. As a general rule, the fever is out of proportion to the pulse rate and a relative bradycardia exists.

Other symptoms are malaise, headache, lassitude, and anorexia. These are sometimes accompanied by nausea and vomiting. The headaches may last until the fastigium is reached, but in our case the headache was the main source of complaint even after the temperature had been down to normal for several days. Retrobulbar pain has been mentioned as a surprisingly common finding.

Salmonella paratyphi A rarely causes gastro-intestinal disturbances. In the present case a severe gastro-intestinal hemorrhage necessitated multiple blood transfusions to bring the patient out of shock. A majority of the cases also have splen-

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[1] Syverton, J. T., Ching, R. E., Cheever, F. S., and Smith, A. B.: Typhoid and Paratyphoid A, J. A. M. A. 131:507 (June 8) 1946.

[2] Longfellow, D. and Luippold, G. F.: Typhoid Vaccine Studies, VI. The Product of Cross-Immunity Between Members of the Typhoid-Paratyphoid Group of Microorganisms, J. Immunol. 45:249 (Dec.) 1942; Typhoid-Paratyphoid Vaccine, Am. J. Pub. Health. 33:561 (May) 1943; Immunization to Typhoid and Paratyphoid Fevers, Am. J. Hyg. 38:139 (Sept.) 1943.

[3] Wilson, G. S.: Principles of Bacteriology and Immunity, Williams and Wilkins, Baltimore, ed. 3, 1946. Jordan.[4]

[4] Jordan, O. E. and Burrows, W.: Textbook of Bacteriology. W. B. Saunders, Philadelphia and London. Ed. 14, revised. 1946.

[5] Andrets, N. F. and Baumstein, G. M.: The Symptoms and Clinical Course of Paratyphoid Fever A, Am. Rev. Soviet Med. 1:233 (Feb.) 1944.

omegaly. Leukopenia and eosinophilia were present in half of the cases studied. The sedimentation rate is usually elevated. The mortality rate is low and in the 300 cases reported occurring in the United States Infantry Regiment, there were no deaths.[6]

Diagnosis

The diagnosis of paratyphoid fevers usually depends on various laboratory procedures. Most investigators have found that the only dependable diagnostic procedures were those that were based on the cultures of blood, urine, and feces supplemented by serial blood agglutination reactions. The definitive diagnosis of Salmonella infection, however, rests on the immunological differentiation using the techniques of antigenic analysis.

The agglutination reaction as a single diagnostic criterion was found to be quite unreliable for distinguishing between the different types of enteric fever, or even for establishing the diagnosis at all in inoculated persons or in those who had previously had the disease. In fact, a single agglutination test may be misleading. The correct interpretation of a single agglutination test depends on several factors: 1) on the natural level of agglutinins in the particular area in which the test is made, 2) on the stage of the disease, and 3) on the history of previous immunizations with typhoid or T.A.B. vaccine. Studies are now being made to determine the level of agglutinins in Hawaii.

There is no particular titer which can be regarded as being "positive" or "negative" in a diagnostic sense. This fact was observed in the clinical experience of one of us (W.O.F.) Experience has shown that titers of typhoid O and H agglutinins vary widely and that only the relatively large fluctuations in the O titer are very suggestive. In this country a titer of 1:50 in H agglutinins or of 1:100 in O agglutinins in patients with no previous immunization or disease may be regarded as strong presumptive evidence of infection.[3] In the immunized group, or in persons with previous enteric infections, the H agglutinins are of little value as they may also be due to non-specific causes. On the other hand, if the O agglutinins are present in a titer of 1:100 or over, six months or more after inoculation, they are strongly suggestive of an active infection, particularly if on reexamination they are found to have altered titers. However, the most important single diagnostic procedure has been found to be the bacteriological culture of the blood when cases were seen within two weeks of the onset of illness.

[6] Krumwiede, C., Jr.: Fecal Examinations of a Regiment Infected with Bacillus Paratyphosus A, with Special Reference to Normal Carriers, Jour. Infec. Dis. 21:141 (Aug.) 1917.

Report of a Case

F. M., a 36 year old Filipino man, entered the hospital on November 22, 1948 complaining of fever and headache of two weeks duration. He was admitted for medical observation to determine the etiology of the fever.

He was first seen by one of us (W. O. F.) on November 4, 1948. His principal complaints at that time were frontal headache, cough, abdominal pain and generalized malaise of two days' duration. Chest x-ray was negative. General physical examination was non-contributory. Temperature was 101.8° F. He was given antibiotics, aspirin and a cough mixture. He continued to have headaches and a low grade temperature. He also complained of constipation. He had lost about ten pounds during his illness. Because of persistent headache and fever he was admitted to the hospital.

He had received immunization with T. A. B. vaccine in 1941-42 and a booster dose in 1944. Otherwise, the past history was non-contributory. He had originally come from the Philippine Islands in 1927.

Laboratory examinations showed a red blood count of 4,160,000 per cubic mm. with 10.6 gm. hemoglobin per 100 cc., a white-cell count of 4,750 per cubic mm. with 45 per cent polymorphonuclear cells, 24 lymphocytes, 28 stabs, 2 monocytes and 1 per cent eosinophiles. The blood agglutination reaction on day of entry showed titers of typhoid O as 1:130, typhoid H as 1:40, paratyphoid A as 1:160, paratyphoid B negative, and Proteus OX19 negative. Urinalysis showed a slight trace of albumin but was otherwise normal. Blood culture taken on Nov. 24, 22 days after the onset of the first symptoms, was positive for Salmonella. This was biochemically and antigenically identified as characteristic of paratyphoid A by the Territorial Board of Health Laboratory.

The patient was treated with sulfadiazine, sulfathiazole and sulfamerazine mixture, and parenterally with streptomycin without appreciable effect on the fever. There was no aureomycin available at that time. He had occasional mild epigastric pains and segments of a tapeworm were later found in his stool. He also continued to complain of persistent frontal headaches. On the eleventh hospital day (December 2) he had a severe gastro-intestinal hemorrhage and went into shock. He was given multiple blood transfusions, oxygen, anticoagulants and other supportive measures. He was also placed on oral streptomycin. His abdomen became moderately distended and Wangensteen suction was instituted. He gradually recovered from this episode. His fever finally became normal on the forty-first day of his illness. Only one stool culture, taken on December 13, was positive. Blood cultures on December 8, 9, and 11 were negative. Repeated urine cultures were negative for Salmonella. The agglutination titers of paratyphoid A and typhoid O went up as high as 1:640 plus on the twenty-seventh day of the disease. On the fifty-sixth day, the titers finally began to diminish. The patient was discharged asymptomatic on the thirty-sixth hospital day.

Summary and Conclusion

In the Territory of Hawaii the most common paratyphoid infection in children is the S. typhimurium in Group C, and in adults the S. montevideo and S. oranienburg in Group C, and the S. derby in Group B.[7] The paratyphoid B infections

[7] Personal Communication from the Territorial Board of Health, Honolulu, T. H.

are relatively rare in this area. The greater incidence of Group C infections may be due to the fact that the conventional T.A.B. vaccine lacks the paratyphoid C group component.

Immunization with the T.A.B. vaccines does not offer complete immunity from the salmonella infections. The history of immunization should not lull one into a false sense of security and into believing that the disease is not one of enteric fever.

The agglutination reaction as a single diagnostic criterion is unreliable and should be confirmed by other laboratory procedures. Experience has shown that the most reliable methods are cultures of blood, urine and stools. The definitive diagnosis lies in the isolation and identification of the microorganisms by the antigenic and biochemical analysis.

The usual antibiotics and chemotherapy had no effect on the disease. There was no aureomycin available.

Acknowledgment

We are indebted to the Territorial Board of Health for assistance in identifying the microorganism.

The Alsup Clinic.
The Queen's Hospital.

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[EDITORIALS]

COMPULSORY HEALTH INSURANCE COSTLY AND IMPRACTICAL*

DOROTHY THOMPSON

It seems certain that we are going to take another step on the road to bureaucratic collectivism by the passage of a compulsory health insurance bill, to which President Truman is pledged.

The United States Public Health Service is for it, as every Government agency is always for a vast extension of its powers. The labor unions and farmers' organizations are for it because it sounds good. Industry would like to saddle the Federal Government with the expense of workmen's compensation cases. Professional social workers foresee great opportunities for themselves. And a mere 150,000 physicians, 90 per cent of whom are against it, cannot buck the trend. Besides, they are supposed to be "prejudiced," on the current theory that those who know most about anything are not reliable witnesses.

Also, the opposition has not been intelligent. It has ranted against "socialization" as though the mere word had conjuring powers. Let this opponent, therefore, make herself clear. I am not against compulsory health insurance because it is "socialistic," but because it is the application of national socialism in the least appropriate field. Also, I have lived under such medical systems in England, Austria and Germany, and they were awful.

Cost Too Much

They cost the people far too much. They provide inferior services at a high price. They are incapable of dealing with really serious and complicated cases. They result in two sorts of medicine—good medicine for the well-to-do; and bad for the masses, at high cost to those who can least afford it. And they build up a vested interest of physicians and bureaucrats which the people will never get rid of.

The great joker in all these schemes is that they are put forward as "free," meaning something for nothing. Let their proponents at least tell the truth. What is advocated is compulsory insurance.

Every worker in this country will have the cost subtracted from his pay envelope, and added (by his employers) to the price of everything he buys. He will be paying for unused aspirins when he needs the money for oranges. He will be supporting innumerable filing clerks—a horrendous paper staff for 150,000,000 people. When and if he gets ill, he will find himself as one of 50 patients (half of them hypochondriacs bent on getting service for their money) whom a physician must examine in an hour!

And if he really is ill—and finds that under the slap-happy methods of overworked doctors, whose fees are assured anyhow, he gets not better but worse—he finally will, in desperation, consult one of those private physicians who refuse to join the assembly line and, atop all he already has put up, week by week, pay a private fee.

How do I know this? Because I have experienced it.

* From Miss Thompson's column, "On the Record," which appeared in *The Evening Star,* Washington, December 21, 1948; reprinted by special permission of Dorothy Thompson and The Bell Syndicate, Inc.

Better Service Needed

Just why this most inventive country seems compelled blindly to copy social measures originating elsewhere is baffling. We need many, many more hospitals. The existing hospitals need public aid, since the sources of private support are increasingly drained off in taxes. And we need more genuinely free medicine for people in real jams.

But before Congress passes any bill for universal sickness insurance—falsely called "health" insurance—it owes it to the American people to tell them exactly what a person with, say, an income of from $2,000 to $3,000 a year is going to have to pay over a working life of 40 years to take care of his illnesses, and just what services the Government positively guarantees him in return for his money. Will it, for instance, sign on the dotted line that if his wife is in labor, the Government guarantees a bed and a physician at the critical moment?

Don't make me laugh! I've lived under these schemes.

CROWNFLOWER KERATOCONJUNCTIVITIS — AND DERMATITIS?

The eye lesions produced by crownflower juice are described by Dr. Wayne Wong elsewhere in this issue. This interesting Hawaiian disorder is essentially an industrial accident which is largely limited to self-employed persons, i.e., lei makers, and which therefore rarely comes to the attention of the Workmen's Compensation Board.

The dermatitis said by Arnold[1] and Wong to result from contact with the milky latex (or sap, or both?) of this and other milkweeds raises an interesting question, namely, the difference between "contact dermatitis" (sensitization dermatitis due to contact, or dermatitis venenata) and "dermatitis escharotica." The former, two classic prototypes of which are poison ivy dermatitis and mango dermatitis, occurs *only in certain specially susceptible individuals after a previous contact has caused them to become sensitive* to the dermatitis-producing agent. The latter, a classic example of which is a "burn" induced by phenol or a strong acid, occurs in any person, whether previously exposed or not. It is clear that crownflower-juice keratoconjunctivitis is thought to belong to the latter category rather than the former; and it is implied that dermatitis due to the juice of this plant also belongs in the latter category.

[1] Arnold, H. L.: Poisonous Plants of Hawaii, Tongg Publishing Co., Honolulu, 1944, p. 31.

This brings up yet another question: the validity of what is "a well-known fact among" any sizeable group of people. If the milky juice of the crownflower is a skin irritant, it is odd that dermatitis of the eyelids, fingers and wrists of persons who pick the blossoms so rarely occurs—if, indeed, it occurs at all. If it is a primary irritant, it is odd that the skin of the writer and his three children is not affected by it. The subject might be worth investigating. Perhaps this white milky juice, like that of some other plants, is not as black as it has been painted.

H.L.A., Jr.

TWENTY-FIVE PER CENT OR ONE-FOURTH?

Per cent, or per cent., or per centum, often written as %, means literally "in each hundred." If a thousand cases of plague occur, and a hundred die, the mortality is 10 (deaths) in each 100 (cases), or 10 per cent. If two hundred operations are performed, and two deaths result, the mortality is 1 (death) in each 100 (operations), or 1 per cent. If 100 neoplasms are removed, and 3 recur, the rate of recurrence is 3 in one hundred, or 3 per cent.

Most physicians are amused by the suggestion that if only one case is seen, and the outcome is fatal, the mortality is 100 in each 100, or 100 per cent. But surprisingly few of them think it is funny to say that 2 deaths out of 8 cases constitutes a mortality of 25 per cent, or, much less, that 20 deaths out of 80 cases justifies the same assertion. We're too familiar with our decimal system, and familiarity has as usual bred the proverbial contempt.

If 2 deaths occur in 8 cases, but the next 92 cases survive, the mortality in that series is 2 per cent, not 25 per cent; should the next 92 cases die, the mortality will be 98 per cent. So actually, 2 deaths among 8 cases do not justify the conclusion that there was 25 per cent mortality: all one can properly say is that the mortality lay somewhere between 2 and 98 per cent.

It is probably better to steer clear of the stylized medical gobbledygook and make the simple and understandable and defensible statement that the mortality amounted to "one-fourth" of the cases—or one-half, or one-eighth, as the case may be. The expression "per cent" should be reserved for the kind of groups it really refers to—groups of 100 or more individuals. Smaller quantities should be dealt with in terms of fractions, even at the risk of seeming less scientific and important.

LEPROSY LEGISLATION IN HAWAII, 1949

The leprosy control program in Hawaii, which has been striding forward so rapidly during the past fifteen years under the guidance of the Board of Hospitals and Settlement and their capable physicians, has been set back somewhat by two hasty and ill-advised pieces of legislation passed by the Twenty-Fifth Legislature.

The first of these revises our laws relating to leprosy by substituting the phrases "Hansen's Disease," "Hansen's Disease sufferer," and so on for leprosy and leprous patient. Happily, this change need not go beyond the phraseology of the law itself; but the implication that leprosy is so dreadful that its name should not even be printed is an unfortunate one and could be harmful. Progress in creating a sane public attitude toward tuberculosis was made by educating the public to accept it under its own proper name as just another contagious disease. It is doubtful whether the same progress could have been made had we insisted on calling it "Koch's Disease" or the like. And calling leprosy "Hansen's Disease" will merely puzzle those who don't know what it means, without bringing any particular comfort to those who do. "A rose, by any other name, would smell as sweet."

The second backward step, passed at top speed in the closing days of the session, dissolved the Board of Hospitals and Settlement as of June 30, turning its functions and employees over, lock, stock and barrel, to the Board of Health. As long as the medical members of the Board of Hospitals and Settlement were more versed or interested in leprosy than those on the Board of Health, it was obviously better to have a separate Board to administer the leprosy program. If this is not to be the case, quite possibly the Board of Health can conduct some phases of the program more efficiently than the smaller unit was able to do. If for any reason, however, this change disturbs the tenure of Dr. Norman R. Sloan, Medical Director of Kalaupapa Settlement, the Territory will be a long, long time regaining the ground it will have lost—if, indeed, it is ever able to regain it.

It is peculiarly unfortunate that this radical change in the administration of the leprosy control program should have been forced through the legislature right on the heels of an admirable Joint Resolution calling for an intensive and thorough two-year study of the whole program in all its aspects. H.L.A., Jr.

REQUIESCAT IN PACE

The National Physicians Committee for the Extension of Medical Service went out of existence on April 10, 1949, after ten years of activity against the proponents of socialized medicine. Its job has been taken over by the American Medical Association under the title of the National Educational Campaign of the American Medical Association.

Postgraduate Lecture Series, 1948

III. PATHOLOGY OF ICTERUS

PAUL KLEMPERER, M.D.*

An anatomic approach to the problem of icterus may seem antiquated, because modern physiologic and functional methods are probably more important in the clinical diagnosis; but it might be interesting to demonstrate and discuss certain anatomical features of more unusual instances of icterus and to see if we cannot find some interesting correlation between clinical observations and anatomical findings.

Icterus is a term applied to discoloration of tissues and body fluids by abnormal accumulations of bile pigments. If the discoloration is due to other substances, for instance, carotine, we speak not of icterus but of pseudoicterus. This distinction became an interesting problem during the first world war, when workers in munitions factories, engaged in the manipulation of picric acid, developed yellow skin; this was due to the absorption of picric acid and was not considered as icterus. But it was found later that in some instances picric acid produces liver damage.

If we had discussed the problem of icterus some three decades ago we would have placed the liver in the center of the whole problem because at that time it was believed that bile pigment was manufactured only in the liver and especially within the liver cells; knowledge of the reticulo-endothelial system had not been advanced at that time. Today we know that bile pigment is most probably manufactured not by the polygonal liver cells but mainly by the cells of the reticulo-endothelial system. I trust that you are familiar with these facts, which were first revealed by the investigations of the Aschoff school and extended by research in various places all over the world, in the United States particularly, by Mann and Magath. It is now believed that the liver cells are only engaged in the excretion of bile pigment, while its manufacture is a responsibility of the reticulo-endothelial system. Yet in the clinical discussion and consideration of icterus the liver is still the center of the problem because it is of utmost importance for the diagnosis and treatment of the icteric patient to ascertain whether the liver is affected or not and in what way it is implicated.

Functional Types of Icterus

Broadly speaking, we can say that the icterus problem centers about the cardinal question: where is the factor located which is responsible for the icterus; before, within, or after the liver cells? This question fully conforms with the accepted classification of icterus. Icterus is due either to overproduction of bile, the so-called hemolytic icterus; or to retention of bile pigment in the blood, as the result of inability of the liver cells to properly excrete the bile, retention icterus; or the icterus is due to obstruction of the excretory channels.

Histologic Types of Icterus

We may inquire whether these types can be differentiated by anatomical and histological examination. I shall show you first a few slides which illustrate that we are able to make a diagnosis of the type of icterus from histologic observations. This is important today because liver biopsy is frequently used in the diagnosis of icterus. The first slide is that of hemolytic icterus. It shows an abnormal accumulation of hemosiderin within the liver, which is evidence of increased destruction of hemoglobin. The hemoglobin is split into bilirubin and hemosiderin. The presence of large amounts of iron pigment in the liver, spleen or bone marrow denotes the hemolytic factor in a case of icterus. In obstructive icterus, as shown in the next slide, we find bile pigment accumulated within the liver cells and also within the Kupffer's cells. The liver cells, which you see, are not severely damaged upon examination with the conventional stains, hematoxylin and eosin. However, if one applies more intricate staining methods, particularly those for mitochondria, one will find definite changes in the liver cells, particularly in chronic obstructive icterus. The mitochondria disappear and we might even find numerous small areas of cell necrosis. This anatomical feature explains the occurrence of liver insufficiency in cases of long-standing icterus due to obstruction. In the next picture you see the evidence of severe destruction of liver cells which is characteristic of retention icterus.

We know, however, that there are cases of icterus in which the mechanism is not clearly revealed by histologic examination. Fortunately, such cases are not frequent. I have seen cases treated with thiouracil who developed extremely severe icterus; liver function tests did not give an answer as to the type of icterus, and the histologic examination of the liver was also of no avail. One could have demonstrated the liver as a perfectly normal organ. Of course, we have to consider that by examination of the mitochondria or of the Golgi apparatus we might have found disorganization of the cytoplasm which could not be seen with the conventional stains. Unfortunately such methods cannot be applied to autopsy material. One has to know however that they can be used in biopsy specimens and thus the nature of the icterus might be ascertained in obscure cases of jaundice.

Obstructive Icterus

I shall first demonstrate a few cases of obstructive icterus. The first picture illustrates an instance which is certainly very familiar to you, the obstruction of the bile duct by numerous stones. But it should be added that sometimes one finds stones in the large bile duct without icterus because these stones are not impacted. In this picture you see the impaction of a stone in the ampulla of Vater and the extreme dilatation of the bile duct. Today such cases are rare. In former years, however, patients who had been icteric for many years due to an impacted gall stone were frequently seen and showed a characteristic dark, almost black, color. Today the severest obstructive icterus is seen in the cases of common duct obstruction due to carcinoma.

I want to add a few words regarding non-malignant forms of obstruction which are rather uncommon, but have to be taken in consideration. Occasionally a chronic

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* Pathologist to Mount Sinai Hospital and Professor of Pathology, Columbia University, New York City.

peptic ulcer of the duodenum may impinge upon the common duct and cause icterus. Another cause is the compression of the common duct by an echinococcus cyst, by gumma, by enlarged lymph nodes, for instance, as in Hodgkin's disease.

I should like to say a word regarding the hypothesis of compression of the common duct due to chronic pancreatitis. I have never been convinced of such an occurrence. I have observed at autopsy cases of icterus which had been attributed to chronic pancreatitis, but in which parenchymal damage of the liver was the actual cause.

Carcinoma

Carcinoma obstructing the common duct may originate in the pancreas, or in the duct itself. The carcinoma may be situated on the duodenal aspect of the papilla or originate within the ampulla. It is known that icterus due to obstruction of the papilla of Vater by carcinoma may be of intermittent type. Sometimes the carcinoma ulcerates and this relieves the obstruction for a while. It might be worthwhile mentioning that one should look for carcinoma cells in aspirated duodenal contents in cases of clinically obscure obstructive jaundice. Then it should also be mentioned that a papilla carcinoma may be present without complete obstruction. The incomplete obstruction causes an ascending infection of the liver and the chronic infection may dominate the clinical picture without severe icterus. We observed only recently such a case, in which the patient had symptoms of a septicemia fourteen months before he died, but only in the last month of his illness did icterus became evident. We shall now consider a case in which the carcinoma is located in the ampulla of Vater. This carcinoma originates in the mucosa of the common duct. The lumen is strikingly dilated, which is sufficient evidence of obstruction. Such cases are easily diagnosed on surgical exploration. If we consider the next picture, however, we see that the obstructing carcinoma is located high up in the main hepatic duct and the terminal portion of the common duct seems perfectly normal. In such an instance, surgical exploration might not reveal the existence of the carcinoma. This is shown in the next picture. The patient was explored about eight months before he died, and the cause of icterus was not ascertained. You see the width of the common duct is perfectly normal, but at the hilum of the liver there is a small annular carcinoma which completely obliterates the lumen. In some cases a carcinoma may originate in one of the large hepatic ducts and gradually encroach upon the bifurcation. Such cases start with mild icterus which gradually deepens and finally becomes complete.

Echinococcosis

The next series of photographs will illustrate a condition which is not of great frequency but is of considerable importance. Many years ago I autopsied a case of icterus of long duration. When we explored the common duct we found it obstructed by a mass which we diagnosed as carcinoma. However, the histological examination did not disclose a malignant tumor but revealed a peculiar granulation tissue which puzzled us very much. Finally, we recognized this to be due to alveolar echinococcus. Histologically, you see a peculiar granulation tissue with giant cells resembling tuberculosis. In other parts of the section, however, you see the typical hyaline membranes of alveolar echinococcus. This parasite is not frequent, neither on the mainland nor in any other part of America. It is however not uncommon in Europe, particularly in the Western part of Germany which was occupied during the first as well as the second world war. In Baden, Germany, for instance, alveolar echinococcus is quite common and familiar to the German pathologists. It provokes a striking infiltration of the liver which might be mistaken for carcinoma. Kaufman's textbook shows a classical picture. Interestingly, the case here demonstrated, and another one which I saw only a few months ago, occurred in veterans who had been stationed in this area of Germany during the war.

Intrahepatic Cholangiitis

So far I have discussed obstructive icterus in which the common duct or the main hepatic ducts were obstructed. We shall discuss now another type of obstructive icterus in which the occluding factor is not so simply ascertained. The next pictures come from the autopsy of a woman who first was operated upon in 1917 at another hospital for chronic cholecystitis. In 1921 the patient entered Mt. Sinai Hospital with the symptoms of obstructive jaundice, with clay-colored stools. Dr. Edwin Beer, the chief surgeon, believed that an injury of the common duct had occurred at the preceding operation and decided to operate. On exploration he thought he found a stenosis of the common duct, and drained it. The patient improved, although her icterus did not completely disappear. She was discharged in excellent general condition. She returned one and one-half years later with severe icterus; she stated that she had never been entirely free of jaundice and that she had had occasional attacks of increasing jaundice. She had noticed fever during these periods. She was again operated upon and drained. Again she improved, but was not without icterus when she left the hospital. All the time it was assumed that she had a cicatricial obstruction of the common duct due to the previous operation. Finally she was admitted to the medical service with severe jaundice and splenomegaly. She died of a severe hemorrhage. The diagnosis of the medical service was splenomegalic cirrhosis, probably Hanot's cirrhosis. At autopsy the common duct was found to be of normal caliber. You see in the picture that the large intrahepatic ducts are not dilated, which contradicts a distal obstruction. The liver was icteric but not cirrhotic. These gross findings could not explain the reason of the obstructive icterus, and we could not understand the case until we saw the histologic sections. I show you only one representative picture because every section showed the same alteration. You see here a periportal field. In these areas of the liver we find normally three characteristic structures: the ramification of the portal vein, a branch of the hepatic artery, and an intrahepatic bile duct. This last, here, we cannot recognize. Instead of an open lumen we see a cord-like structure which is the completely occluded intrahepatic biliary duct. We are dealing here with a condition of intrahepatic obstructive cholangiolitis. German clinicians have been aware of this condition and have referred to it as cholangiitis lenta. Schottmueller first described this entity. He cultured streptococcus viridans from the liver in one of his cases and for this reason he applied the name cholangiitis lenta by analogy with streptococcus viridans infections of the cardiac valves which he had termed endocarditis lenta, the subacute bacterial endocarditis of Emanuel Libman. Since the observation of this first case I have encountered several other instances; in some of these a biopsy of the liver was performed. The next picture comes from such an observation. It was a case with a similar history: there was recurrent icterus and each recurrence was associated with temperature elevation.

Biopsy in this case showed narrowing of the intrahepatic biliary ducts, which were surrounded by inflammatory cells including numerous polymorphonuclear leucocytes. This patient came to autopsy three years after the onset of icterus; during his observations on the wards all liver function tests spoke for obstructive icterus. At necropsy the liver was firm, green, and granular, showing the picture of a biliary cirrhosis. The other organs presented features of Laennec's cirrhosis, such as splenomegaly and esophageal varices, the patient dying of hemorrhage from rupture of these dilated veins. The chronic cholangiitis, therefore, may terminate with the picture of biliary obstructive cirrhosis, which has been known for many years to be the end result of longstanding obstruction of the common duct by stones. This pathological entity was produced experimentally by Charcot and Gombault by ligation of the common duct. In cases of intrahepatic obstruction of the small bile ducts the appearance of the liver might be identical, but on exploration of the large duct one does not find dilatation. The site of the obstruction is within the ramifications of the intrahepatic bile ducts. It is evident from the discussion of the first case that surgical drainage of the common duct may cause some retardation of the morbid process, but nevertheless it gradually progresses to a fatal issue. Today, with the opportunity of using antibiotics, it seems important to call your attention to such cases of chronic recurrent intrahepatic cholangiitis. I think one would be justified in trying penicillin or streptomycin therapy in the hope of influencing the infection of the intrahepatic ducts. The knowledge of this form of cholangiitis is of clinical importance. I might add a point that is more of academic interest. It is my belief that Hanot's cirrhosis, which is so puzzling a disease, might be nothing else than chronic obstructive intrahepatic cholangiitis.

Retention Icterus

Acute Yellow Atrophy

I come now to that group of liver disease causing icterus in which the liver cells are primarily affected. The classical type is the acute yellow atrophy which was described by Rokitansky more than a hundred years ago. The macroscopic picture which I will present does not convincingly reflect the actual appearance at autopsy. Rokitansky recorded in his original description that the liver "is melting away," and this term well denotes the condition and consistency of the liver, which of course cannot very well be recognized in a picture. The next slide will show you another feature, namely the evident inability of the liver to excrete bile. The gall bladder in the greater number of cases of a few days' duration contains white bile. Today in civilian practice we rarely see cases of fulminating acute yellow atrophy which were seen by the older pathologists. However, during the war, when the military surgeons and pathologists had the opportunity to observe fatal cases of infectious hepatitis, they recognized the same picture which was classically seen in previous years. This indicates that infectious hepatitis in its fatal issues produces anatomical lesions which are indistinguishable from the classical acute yellow atrophy of Rokitansky.

In the first period the destruction of the liver parenchyma dominates the picture; there is not much fat infiltration and the yellow color of the liver is in the main due to icterus. A few weeks after the onset of icterus the liver becomes red, and we speak of red atrophy. The first histological slide shows the acute state of yellow atrophy, to which at the present time the term diffuse necrosis of the liver has been given. You see in this liver lobule all cells without nuclei, which indicates necrosis. In the next slide there is also absence of liver cells. In addition, however, there is striking dilatation of the capillaries. This distention of the capillaries which follows the primary destruction of the liver explains the macroscopic picture of red atrophy. Moreover, one sees on histological examination infiltration with lymphocytes, polymorphonuclear leucocytes and histiocytes. This infiltration, which can be seen after the primary destruction of the liver cells, is an indication of beginning repair. As evidence that in acute yellow atrophy only the liver cells are destroyed, and that the framework of the liver is not affected, I present this silver stain, which shows that the reticulum fibers of the liver are perfectly normal. Acute yellow atrophy is therefore a classical example of a pure hepato-cellular disease.

In the later stages of the disease, that is after the fourth week of icterus, there is more inflammatory reaction and at the same time one observes parenchymal regeneration, which originates from the remainder of the liver cells which have escaped the original catastrophic destruction and possibly from the bile ducts. It is probable that the inflammatory features seen in the later phases are the forerunners of the cirrhotic picture which is seen in some cases which have survived the acute liver necrosis.

The next picture shows the late stages of the disease, this case dying seven months after the onset of icterus. The appearance of icterus denotes the beginning of liver destruction. We see in this picture smooth areas on the surface which represent parenchymal portions in which the liver cells have been completely destroyed. In addition, however, you see adenomatous nodules representing regenerated liver parenchyma. This is a case in which the adenomatous hyperplasia has not reached marked dimension. If a case of liver atrophy survives, however, for years the picture is different, and what we encounter at the autopsy table is well represented in the next specimen. There are large nodules of regenerated liver tissue and, in between, areas of apparent fibrous tissue which has developed between the islands of adenomatous hyperplasia.

Toxic Cirrhosis

We have cases in which regeneration and repair has advanced to such an extent that the anatomic picture resembles that of an actual cirrhosis. This type of cirrhosis, however, differs from the typical Laennec's cirrhosis by the fact that the nodules are very coarse and therefore they were first described as "coarse nodular cirrhosis," while Marchand referred to them as adenomatous hyperplasia. Mallory in this country has paid much attention to this condition and has applied the term "toxic cirrhosis." Therefore we understand by the term toxic cirrhosis a morbid process of the liver which is secondary to a diffuse necrosis of the liver cells. Rarely do we observe cases in which icterus preceded the death of the patient by many years. As a rule, what we call toxic cirrhosis is the end stage of a process which has started several months before and has proceeded without remission to a fatal issue. In all my experience in civilian hospitals, and I emphasize, civilian experience, I have seen only 2 cases of this type which were discovered accidentally at autopsy. Upon inquiry from the family it was found that in both cases the patient had been icteric ten and fifteen years before, respectively,

but had completely recovered. This seemed to provide evidence that a transient and non-fatal icterus may be associated with severe liver damage which, however, may be compensated by regeneration of the liver, causing the picture of toxic cirrhosis. It is of great importance that this possibility be kept in mind, because during the war there were thousands of cases of transient infectious hepatitis, and such patients are possibly candidates for this type of liver cirrhosis; but we must emphasize that we are not certain at all how often this may occur.

I show the next slides because they reveal the occasional difficulties in the differential diagnosis between Laennec and toxic cirrhosis. The lower surface of the liver in this case looked like a Laennec's cirrhosis. The upper surface, however, showed flat depressed areas and large nodules, and this appearance contradicts the diagnosis of Laennec's cirrhosis. On cross-section one sees extended areas of atrophic liver tissue in which a few nodules of liver parenchyma may still be seen. On the strength of these findings one can definitely make the diagnosis of toxic cirrhosis. This case showed classical features of portal hypertension, namely splenomegaly and marked distention of the esophageal veins; he finally died of rupture of one of these varices. The next picture is from a case of Laennec's cirrhosis with typical hob-nail surface. The next picture shows the same but with adenoma formation.

We have recognized the difference in the gross anatomy of these two types of cirrhosis. We believe that the pathogenesis is also different. In a general way one might say that in toxic cirrhosis the original liver cell destruction seems to have been catastrophic and extensive, while the pathogenesis of Laennec's cirrhosis could be explained by slowly progressive but constantly repeated cell destruction. Cell disintegration is the common pathogenetic factor of both forms of liver cirrhosis.

There is in my opinion no question but that Laennec's cirrhosis is also due to a primary parenchymal damage and is not the result of a primary implication of the stroma. This belief I think is supported by the investigations of the last ten years of experimental production of liver cirrhosis in rats by a low protein diet. If one conducts such experiments for a period of months one can produce a picture of cirrhosis very similar to that of Laennec's cirrhosis. If one sacrifices animals for histological examination at earlier periods one can see that there is constant destruction of individual liver cells, but large areas are not affected. If on the other hand one uses liver poisons like chloroform, or carbon tetrachloride, one produces areas of extensive destruction. This is probably also the main difference in the pathogenesis of human toxic and Laennec's cirrhosis, at least as far as we can conclude from the morphogenetic point of view. As to the etiology of the catastrophic liver destruction the investigations of recent years have proved that a virus has to be considered as well as chemical toxic agents.

Catarrhal Jaundice

We now come to the discussion of catarrhal jaundice and its relation to infectious and serum hepatitis. Up to the turn of the century it was accepted that catarrhal jaundice is due to a mucous plug obstructing the common duct. This was accepted on the authority of Virchow who was supposed to have found this mucus plug at the autopsy of a case of catarrhal jaundice. If one however takes the pain to read Virchow's original article one finds that Virchow did not report upon a case of catarrhal jaundice but on a case of sepsis with jaundice. Mucus plugs subsequently were used as an explanation for all mild forms of jaundice of relatively short duration in which no other cause could be ascertained. During world War I epidemics of icterus were observed in the armed forces of all the warring nations and the clinical similarity between these cases and the sporadic instances of catarrhal jaundice became evident. This form of infectious hepatitis seemed to be the epidemic form of sporadic catarrhal icterus and a similar pathogenetic mechanism was assumed to exist.

During 1918 Eppinger had the opportunity of observing at autopsy 3 soldiers who had belonged to a combat unit in which epidemic icterus was prevailing. These soldiers had died of tetanus, but they had been jaundiced. Eppinger found scattered liver cell necrosis upon histological examination and referred to the hepatic lesions as acute yellow atrophy *en miniature*. His findings were noted but their general significance for the problem of catarrhal icterus was not recognized. It was also objected that his cases had died of tetanus and that the tetanus had been responsible for the liver changes.

It was therefore rather fortunate that in 1926 Dr. Charles Gordon Heyd in N.Y. Post Graduate Hospital operated on a patient who had been jaundiced for four weeks. The icterus did not improve. Although most of the attending physicians believed that it was a catarrhal jaundice, Heyd did not want to neglect the possibility of a common duct stone and performed an exploratory laparotomy. On opening the abdomen he found no evidence of obstruction and removed a small piece of the liver for histologic examination. In this small fragment of the liver we found areas of complete atrophy. Since it was four weeks after the onset of icterus, acute changes were not striking but still evident. This observation of continued liver cell destruction is of significance because we know today that hepatitis of viral origin may continue even without icterus. On the strength of the histological findings, which were subsequently confirmed by other authors, we concluded that Eppinger had been perfectly correct and that these destructive hepatic lesions are the anatomical pattern in both the epidemic and the sporadic form of hepatitis, or so-called catarrhal jaundice.

Infectious vs. Serum Hepatitis

During World War II, great interest arose because of the occurrence of many thousands of cases of epidemic icterus. It is familiar to you, I am sure, that at the beginning of World War II, subsequent to vaccination of a large number of Armed Forces with yellow fever vaccine, an icterus epidemic occurred in which thousands of soldiers were affected. The great majority of the cases presented the clinical picture of a relatively mild icterus; but of the thousands who had been exposed to the yellow fever vaccine, 66 men died. At autopsy each one of these showed the picture of classical acute yellow atrophy.

A number of the soldiers who had completely recovered from the icterus died subsequently, some of them in accidents. Dr. Lucke examined these patients at autopsy and found that their liver was mostly normal. In the light of our present experience we can say that this was an epidemic outbreak of serum hepatitis.

During the campaign in North Africa and Italy epidemics of icterus were observed which could not be traced to a similar cause. These are the cases referred to as infectious hepatitis. On the mainland we see at

present both serum and infectious hepatitis. The former is unfortunately not rare; this is due to the fact that the selection of blood donors has become very difficult. Obviously one would exclude as donors those who give a history of jaundice, but prospective donors may harbor the virus of serum hepatitis without showing clinical evidence of disease.

One must be alert to the existence of serum hepatitis, and I should like to illustrate the problem with the demonstration of the following case. An elderly gentleman came to the hospital in November 1946 with icterus. After complete examination it was found that he had a cholecystitis with a common duct stone. He was operated and an empyema of the gall bladder with cholelithiasis was found. The gall bladder was removed, and the patient made an uneventful recovery. He left the hospital in November 1946 in excellent health. At the end of January 1947, he returned to the hospital with icterus. He was carefully examined; all liver function tests were performed but they were equivocal. It was finally decided that he should be re-operated upon because of the probability of common duct stones which had not been noted during the first operation. A competent surgeon explored the common duct up and down. The patient died postoperatively. At autopsy there was no evidence of common duct occlusion. On histologic examination we found scattered areas of liver cell destruction. When this was seen I inquired if the patient had ever had a blood transfusion. Indeed, he had been transfused at the time of his first admission, two months previously. We have seen two more autopsy cases with relatively mild liver damage, subsequent to transfusion, but we also saw 5 cases of fatal acute yellow atrophy, 4 following the use of plasma and 1 subsequent to full blood transfusion.

As to the present status of our knowledge of the etiology of these two forms of icterus, we are better informed regarding the infectious form because experiments are more easily performed. There are no animals available at the present time to which the virus can be transmitted; only shortly before I left the mainland I heard that canary birds might prove to be susceptible to experimental infection. Other animals, however, particularly mammalians, do not contract icterus and are therefore of no avail in experimentation; but there has been the opportunity of using human volunteers. These experiments have shown that the virus of infectious hepatitis can be transmitted by feeding as well as by parenteral injection. The virus of serum hepatitis can be transmitted only by injection. A fact which speaks against the identity of both viruses is that there is no cross-immunity; a subject who has been infected with infectious hepatitis can still be infected with the virus of serum hepatitis.

All these investigations are of great importance but not all the facts have yet been revealed. What we can conclude today is that acute yellow atrophy and particularly the milder clinical forms referred to as catarrhal icterus are in part at least of viral origin. Whether all the cases are caused by virus and what role chemical factors play is not yet fully understood. We know, of course, that certain chemical compounds such as phosphorus, chloroform, carbon tetrachloride, and others may provoke the picture of liver necrosis. One is often able to differentiate histologically between the genuine hepatic yellow atrophy and chemical liver necrosis. There remains however still a considerable amount of investigation. I think that we have in the anatomic findings a certain lead which will be helpful in experimental research.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 281st regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on February 10, 1949. The meeting was called to order by the present, Dr. L. R. Fernandez. Members present were: Drs. Leo Bernstein, S. R. Brown, M. H. Chang, W. T. Chock, L. R. Fernandez, R. S. Fillmore, S. M. Haraguchi, S. Kasamoto, W. Loo, R. M. Miyamoto, C. L. Phillips, H. M. Sexton, Henry B. Yuen. Guests present: Dr. Norman Sloan, Dr. C. L. Wilbar, Jr., Mr. Harold Stein.

Dr. Norman Sloan, Resident Physician at Kalaupapa, presented an illustrated lecture on the "Diagnosis and Treatment of Leprosy."

* * *

A special scientific meeting was held in the staff room of the Hilo Memorial Hospital on March 1, 1949. The meeting was called to order by the secretary, Dr. Leo Bernstein, at 8:00 p.m. Members present were: Drs. L. Bernstein, M. H. Chang, M. L. Chang, S. M. Haraguchi, J. T. Jenkin, S. Kasamoto, H. B. Yuen. Guests present were: Dr. John Lynn, Dr. Pauline Stitt, Miss Willa Murray.

Dr. John Lynn discussed "The Social and Emotional Development of The Child."

* * *

The annual meeting, the 282nd regular meeting of the Hawaii County Medical Society, was held at the Honokaa Club Hotel on March 26, 1949.

A letter from Dr. Phillip Chock who is studying on the mainland was read. Dr. Chock requested a leave of absence or resignation from the Society if dues and assessments could not be waived. It was moved by Dr. A. Orenstein, seconded by Dr. H. Yuen and voted unanimously that Dr. Chock's resignation be accepted in order to avoid financial obligations and that the Constitution and By-Laws be amended to permit a waiver of the initiation fee upon the readmission of members who resign to pursue further studies or because of sickness. The Secretary was instructed to send an explanatory letter to Dr. Chock. A similar letter was requested for Dr. Arimizu who has been on a leave of absence for some time.

It was moved by Dr. A. Orenstein, seconded by Dr. H. Yuen and voted unanimously to approve with regret the request of Dr. H. Sexton for transfer of membership to the Honolulu County Medical Society on May 1, 1949.

It was moved by Dr. A. Orenstein, seconded by Dr. W. Loo and voted unanimously to elect Dr. L. L. Sexton into honorary membership in the Hawaii County Medical Society upon his resignation from regular membership on June 1, 1949. Plans for a dinner meeting in honor of Dr. Sexton were discussed.

Dr. Pete Okumoto was elected unanimously by secret ballot as a member of the Society.

The following resolution was unanimously adopted upon the motion of Dr. W. Bergin, seconded by Dr. H. Sexton:

"Be it resolved, that the Hawaii Medical Service Association, a non-profit Association, be requested to cause its Constitution and By-Laws, insofar as the same relate to the composition of its Board of Directors, to be amended to provide that the representatives of the medical profession on its Board of Directors be designated by the several county medical societies, and to permit the Hawaii County Medical Society to name one of its members to serve as a member of said Board of Directors, and to serve for a period of two years."

The President expressed the appreciation of the Society to Dr. H. E. Crawford and Mr. R. Savio for accepting the invitation from the Hilo Kiwanis Club to participate in a debate on the "Forum of the Air" opposing compulsory health insurance.

The Nominating Committee presented the following nominations for officers of the Hawaii County Medical Society for the year 1949-1950:

President.....Dr. George Tomoguchi
Vice-President.....Dr. Leo Bernstein
Secretary.....Dr. Robert Miyamoto
Treasurer.....Dr. Samuel Haraguchi

It was moved by Dr. A. Orenstein, seconded by Dr. C. Carter and voted to close the nominations and instruct the Secretary to cast a unanimous ballot.

Nominations were received from the floor for Delegates and Alternate Delegates. Drs. W. Seymour and L. Bernstein were elected delegates, and Drs. H. Okada and T. D. Woo, alternate delegates.

Leo Bernstein, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Society was held in the Mabel Smyth Auditorium March 4, 1949; 73 members were present. Doctor Clarence T. Simon, Professor of Speech at the University of Hawaii, discussed language difficulties in childhood.

The Society approved a letter from Dr. Robert Faus asking Dr. Howard of the Council on National Emergency Medical Service of the A.M.A. to inform us what Hawaii's quota of doctors should be at this time.

It was announced that the Budget Committee had found the Society's finances in unsound condition, and the following proposed amendment to the By-Laws was read:

"Chapter 6, Section 2. a. The annual dues of regular members for each fiscal year, and the method of their payment, shall be fixed by action of the Society at the last regular meeting of the preceding fiscal year."

The Budget Committee then presented two proposed alternative budgets for consideration and final action at the April meeting. The budgets were discussed at length in both principal and detail.

Dr. Majoska presented a report of the activities of the joint legislative committees of the Hawaii Territorial Medical Association and the Honolulu County Medical Society, and the joint committees were authorized by vote to act as the Honolulu County Society's spokesman in regard to health legislation.

Dr. J. Robert Jacobson of the staff of the Territorial Hospital gave a talk entitled Psychobiological Problems in Childhood and presented three successfully treated sample cases. Dr. L. G. Phillips discussed the background and history of the controversy regarding the Pratt-Jacobson program in the public schools, and Dr. John G. Lynn IV gave a critique of the methods used in the program.

A special meeting of the Honolulu County Medical Society and Oahu Dental Society was held Wednesday, March 9, 1949, at 7:30 p.m. in the Mabel Smyth Building.

About 33 physicians and 32 dentists were present including Dr. Boyden (Kauai), Dr. Rockett (Maui), Dr. Harold Sexton (Hawaii) and Dr. L. W. Colton, D.D.S. and Dr. Edward H. Goo, D.D.S., from Maui.

The chairman explained that this special meeting was called to outline to the physicians and dentists the plan of the new public relations educational campaign and also to explain to the physicians how their $25 A.M.A. assessment is being used.

Mr. Claude Jagger, president of the Hawaiian Economic Foundation, gave a talk entitled Public Attitudes Toward the Medical and Dental Professions.

Dr. F. J. Pinkerton gave a resume of the A.M.A. meeting in Chicago on February 12 and 13.

Dr. Harry I. Kurisaki, president of the Territorial Dental Association gave an outline of the program of the American Dental Association in relation to the A.M.A.'s program.

Dr. Arnold, Jr., explained what the A.M.A. plans to do with the $25 assessment.

Dr. Phillips spoke on what he termed a "Self Analysis of the Profession."

Dr. Majoska reported on what is being done by the joint legislative committee of the Honolulu County Medical Society and the Hawaii Territorial Medical Association in regard to health bills or any other legislation that in any way pertains to the professions.

A questionnaire was circulated at this meeting regarding legislative information, distribution of pamphlets, etc., and the formation of a speakers' bureau.

Dr. Giles discussed the importance of the various county societies, clubs, etc., interested in health, lay groups and others drawing up resolutions to be sent to their legislators, the President of the United States, and to Delegate Farrington in order to make our stand known to these people.

SAMUEL L. YEE, M.D.
Secretary

The annual meeting of the Honolulu County Medical Society was held April 1, 1949, in the auditorium of the Mabel Smyth Building. About 155 members were present. A movie on breast cancer was shown. Reports of committee chairmen and other officers were read and approved.

Of particular importance were the reports of the Budget Committee and Treasurer. The Budget Committee made the following recommendations:

1. The Honolulu County Medical Society shall maintain its business on a "pay as you go" basis.
2. The newly elected officers and the new Board of Governors shall decide how to invest, keep or use the monies on hand as of February 28, 1949.
3. The dues of regular members shall be increased from $60.00 to $75.00 per year.
4. The dues of institutional members, whose sole income is from their salary, shall be increased from $30.00 to $37.50 per year.
5. The By-Laws shall be amended to provide for elimination of the $50.00 initiation fee.

These recommendations were accepted without dissent, and the By-Laws were then amended as proposed at the previous meeting to permit the dues to be changed. The following budget was proposed and adopted by the membership:

ITEM, DEBIT	SPENT 1948-49	BUDGET 1949-50
Library	$ 8,000.00	$ 7,000.00
Salaries	6,344.00	4,200.00
Territorial Association (dues and Journal)	4,692.00	6,182.00
Postgraduate education	2,553.00	.....
Nursing Service Bureau	1,200.00	600.00
Rent, Mabel Smyth Building	720.00	720.00
Telephone and radiograms	225.78	250.00
Mimeographing and printing	25.00	300.00
Supplies	456.74	425.00
Postage	261.13	300.00
Taxes	170.54	.....
Entertainment	299.29	200.00
Audit and legal	225.00	250.00
Miscellaneous	186.63	200.00
Furniture and fixtures	171.50	50.00
Advertising	75.72	75.00
Chamber of Commerce dues	.....	40.00
TOTAL	$25,904.36	$21,042.00

ITEM, CREDIT	INCOME 1948-49	BUDGET 1949-50
Hospitals (service to indigent patients)	$ 238.18	$ .....
Dues	16,812.00	20,535.00
Miscellaneuos income	254.06	257.00
TOTAL	$17,518.74	$21,042.00

The Secretary reported a total membership of 323, consisting of 281 regular members, 17 honorary members, and 9 non-resident, 7 retired, 4 life and 1 service member.

Dr. Gotshalk read the following proposed amendment to the By-Laws, changing the last sentence of Chapter 5, Section 4, to read as follows:

"It [the Nominating Committee] shall prepare a list of nominations for all elective offices in the Society and the nominations shall be circulated to the general membership at least 7 days before the annual meeting."

The annual election of officers was then held, with numerous nominations from the floor for nearly every office, and the following were elected to office by written ballot:

President: DR. HARRY L. ARNOLD, JR.
Vice-President: DR. SAMUEL L. YEE
Secretary: DR. JOHN DEVEREUX
Treasurer: DR. WILLIAM WALSH
Board of Governors (for two years)
DR. WILLIAM ITO
DR. JOHN FELIX
DR. RICHARD DURANT
Alternates, Board of Governors (for one year)
DR. ALVIN MAJOSKA
DR. TORU NISHIGAYA
DR. ROBERT BENSON
Board of Censors (for three years)
DR. MON FAH CHUNG
Delegates, H.T.M.A. (for two years)
DR. SAMUEL L. YEE
DR. JOHN BELL
DR. H. C. GOTSHALK
DR. FRANK C. SPENCER
DR. L. A. R. GASPAR
DR. S. NISHIJIMA
Alternate Delegates, H.T.M.A. (for two years)
DR. C. M. BURGESS
DR. EDWARD CUSHNIE
DR. K. S. TOM
Representatives to H.M.S.A. (for two years)
DR. RICHARD DURANT
DR. THOMAS RICHERT
DR. HERBERT ROTHWELL
Committee on Forms of Medical Practice (for five years)
DR. H. C. GOTSHALK

It was voted that the Territorial Association be requested through its Council to submit its annual meeting agenda and its nominees for election to office to the

Board of Governors of the Honolulu County Medical Society at their next meeting, and also to the other component county societies.

A proposed amendment to Chapter 1, Section 2.b.4. of the By-Laws was read, as follows:

"Interne membership shall terminate when the member is no longer in interne or resident service."

It was voted that the Board of Governors instruct the Society's delegates to the H.T.M.A. as to the Society's wishes prior to the annual meeting of the Association.

The meeting was adjourned after a brief message from the new president.

JOHN W. DEVEREUX, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital in Lihue on January 12, 1949. Members present were: Drs. Bickell, Boyden, Brennecke, Chisholm, Cockett, Fujii, Goodhue, Ishii, Kuhns, Mason, Masunaga and Wallis. Dr. Steuerman, resident physician at the Wilcox Memorial Hospital, was present as guest.

It was moved, seconded and unanimously resolved that charges for letters of information be payable by the insurance company and a fee of $3.00 be charged per form. The secretary was instructed to communicate with Mrs. Edith C. Bennett, Executive Secretary of the Hawaii Territorial Medical Association concerning this.

The question of a $25.00 assessment per capita levied on each A.M.A. member was discussed. It was moved, seconded and carried that the Treasurer forward the sum of $350.00 for fourteen active members at $25.00 per member to the Hawaii Territorial Medical Association.

* * *

The regular monthly meeting of the Kauai County Medical Society was called to order by President Cockett at the Kauai Inn on March 9, 1949, in Lihue. Members present were: Drs. Bickell, Brennecke, Cockett, Fujii, Goodhue, Ishii, Kuhns, Masunaga, Wade and Wallis. Guests present were: Dr. Mildred Trotter, Professor of Gross Anatomy, Washington University, St. Louis, Mo., who is now with the Army Central Identification Laboratory in Hawaii, and Dr. Steuerman, resident physician at the Wilcox Memorial Hospital in Lihue, T. H.

President Cockett presented Dr. Trotter who gave a very interesting dissertation to the members, wives and guests on her work with the Army in Hawaii.

A letter from Noboru Miyake, Representative of the Sixth District of the Hawaii Territorial Legislature, concerning the establishment of a County Hospital on Kauai was read. It was unanimously carried that the Kauai County Medical Society is in favor of this and that the Secretary inform Mr. Miyake of our approval.

The question of a voice in the management of the Hawaii Medical Service Association was brought up and discussed. It was moved, seconded and unanimously resolved that the Secretary inform the Hawaii Medical Service Association of the following:

"BE IT RESOLVED, that the HAWAII MEDICAL SERVICE ASSOCIATION, a non-profit association, be requested to cause its Constitution and By-Laws, insofar as the same relate to the composition of its Board of Directors, to be amended to provide that the representatives of the medical profession on its Board of Directors be designated by the several County Medical Societies, and to permit the Kauai County Medical Society to name one of its members to serve as a member of said Board of Directors, and to serve for a period of two years."

The following members were nominated and unanimously elected to serve as officers of the Kauai County Medical Society for the year 1949-1950:

President.....DR. E. MASUNAGA
Vice-President.....DR. W. W. GOODHUE
Secretary-Treasurer.....DR. J. MASON
Board of Censors.....DR. M. A. BRENNECKE
(Term to expire in 1952)
Delegate.....DR. B. O. WADE
Alternate Delegate.....DR. A. W. BOYDEN

President Cockett spoke to the members on the passing of Dr. David Liu, a well liked and admired colleague. The members of the Kauai County Medical Society extend their deepest sympathy to the family of the late Dr. Liu.

W. W. GOODHUE, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The Maui County Medical Society met at 7:30 p.m., March 15, 1949, at Kula Sanitarium. Members present: Drs. Kanda, Patterson, Rockett, Jim, Izumi, Cole, Haywood, H. Kushi, Kashiwa, Burden, Shimokawa, Fleming, Toney, Tofukuji, Sanders, Tompkins, Beland and Underwood. Guest: Dr. Ferkany.

A letter from Dr. Reppun to Dr. Sensenich, President of the A.M.A. giving his personal views on the $25.00 assessment levied by the national society was read by the secretary and discussed by the members. It was moved by Dr. Fleming, seconded by Dr. Toney, that a letter of commendation be sent to Dr. Reppun. Motion was discussed by the members and since Dr. Reppun's letter was written to Dr. Sensenich and merely an information copy was sent to our society the motion failed to pass by a vote of 17 to 2.

The Nominating Committee submitted the following names:

President.....DR. E. B. UNDERWOOD
Vice-President.....DR. E. T. SHIMOKAWA
Secretary-Treasurer.....DR. R. F. COLE

Dr. W. Toney was nominated for Vice-President from the floor. It was moved by Dr. Sanders, seconded by Dr. Toney that the secretary be instructed to cast a unanimous ballot for the names submitted by the Nominating Committee. Passed unanimously.

Drs. Burden and Tompkins were elected Delegates to the Territorial meeting.

Dr. Ferkany gave a very interesting paper supplemented by X-rays on the value of bronchoscopy in the diagnosis and treatment of various diseases and tumors of the chest. The discussion of the paper was led by Dr. Tompkins.

E. B. UNDERWOOD, M.D.
Secretary

A dinner meeting of the Maui County Medical Society was held at the Maui Grand Hotel at 6:30 p.m. on April 12, 1949.

It was voted unanimously that meetings hereafter be held on the third Tuesday rather than the second Tuesday of the month.

Dr. Ohata was elected a member of the Maui County Medical Society by transfer from Illinois Medical Association.

Dr. Underwood appointed the following committees:

Medical Disaster Committee
DR. MCARTHUR (CHAIRMAN); ST. SURE; TOMPKINS; BURDEN; TONEY AND ALLEN.
Medical Economics and Public Relations Council
DR. ST. SURE (CHAIRMAN); SANDERS; K. IZUMI; COLE; E. KUSHI AND ROCKETT.
Program Committee
DR. PATTERSON (CHAIRMAN); KASHIWA AND H. KUSHI.

(Continued on Page 364)

Medical News

The many serious disadvantages of dicumarol have led some workers to believe that heparin in a menstruum which delays absorption will prove to be a more practical anticoagulant (Artz, *et. al., Am. J. Surg.* 77:47 [Jan.] 1949). Heparin in gelatin, which gives an anticoagulant effect for twenty-four hours with a single intramuscular injection, is now available (Depo-heparin, Upjohn). It has been found that caronamide sensitizes to the action of heparin (McCleery, *et al.; Surgery* 24:348 [Aug.] 1948). Caronamide does not block renal excretion of heparin as it does with penicillin, but increases the anticoagulant effect of each dose of heparin, permitting the use of smaller doses of this still very expensive drug. Instantaneous anticoagulant effect is obtained by injecting 3 grams of caronamide and 50 mgm. of heparin intravenously. The therapeutic level is a coagulation time of thirty to forty minutes. As the effect of the initial intravenous injection wears off, as shown by venous clotting times done every four hours, additional injections of heparin in gelatin, in doses of about 200 mgm. of heparin, are given intramuscularly at about twenty-four hour intervals.

* * *

Oral vitamin K is advised for all patients who are given sulfathalidine or other unabsorbable sulfas in preparation for colon surgery. The coliform bacteria manufacture most of the body's vitamin K, and a deficiency of this vitamin develops when the gut is sterilized. The hypoprothrombinemia which results is directly proportional in severity to the bacteriostatic efficacy of the sulfa which is used. Wright and others (*Surg., Gynec. & Obst.* 88:201 [Feb.] 1949) found a significant increase in clotting and bleeding times in 71 patients given sulfathalidine. Other authors have reported alarming bleeding from rectal carcinomas following preoperative use of unabsorbable sulfonamides.

Parpanit, a synthetic antispasmodic related to trasentin, relieves the rigidity of Parkinsonism. Like Tolserol (Myanesin) another recent importation from Europe, it has little effect on Parkinsonian tremor. (Schwab, R. S., and Leigh, *J.A.M.A.* 139:629 [Mar. 5] 1949.)

* * *

Overdosage with dicumarol, inevitable wherever this whimsical drug is used in effective doses, is occurring more and more frequently as dicumarol comes into wider use. The antidote, vitamin K, is often agonizingly slow in action, even in the currently popular massive doses. Vitamins P and C apparently have a synergistic action in neutralizing dicumarol's hypoprothrombinemic effects (Marken, E. J., and Swayne, B., *Science* 109:201 [Feb. 25] 1949). Ascorbic acid and rutin would appear to be rational adjuvants to therapy with vitamin K when the situation is not grave enough to demand blood transfusion in cases of overdosage with dicumarol.

* * *

Isuprel (already marketed as Aleudrine in England) is an isomer of epinephrine with advantages that make it a useful addition to the family of drugs used in treating bronchial asthma. It can be given hypodermically in a concentration of 1:5000 instead of the 1:1000 dilution customarily used with epinephrine, but its unique usefulness lies in the fact that it works when given sublingually. It relieves mild and moderately severe attacks when given in this way. A 10 milligram tablet is given sublingually every thirty minutes until relief is obtained. This would seem to be much more convenient than inhalation or injection of epinephrine, especially for chronic asthmatics who need frequent medication. Isuprel is not effective in very severe attacks of asthma. (Lowell, Curley & Schiller, *New Eng. J. Med.* 240:45 [Jan. 13] 1949.)

C. A. Domzalski, Jr., M.D.

COUNTY SOCIETY REPORTS

(Continued from Page 363)

First Aid for County Fair
Dr. Wong.
First Aid for Fourth of July
Dr. Jim.
Publicity
Dr. Cole.
Consultants to Cancer Committee
Dr. Haywood (Chairman); Tofukuji and Ferkany.
Blood Bank
Dr. Rockett (Chairman); Kashiwa; Wong; Jim and Haywood.
Legislature Committee
Dr. Sanders (Chairman); Shimokawa and Cole.
Grievance Committee
Dr. Izumi (Chairman); St. Sure and Toney.
Annual Picnic
Dr. Sanders and Dr. Burden.
Advisors to Auxiliary
Dr. Sanders and Dr. Burden.

It was voted that Dr. McArthur be designated as Counselor.

It was moved by Dr. Toney and seconded by Dr. Fleming that the Maui County Medical Society adopt a resolution petitioning the H.M.S.A. to change their By-Laws to allow a member of the Maui County Medical Society to be a Member of the Board of Directors of the H.M.S.A. Passed unanimously.

Dr. Palma, President of the Territorial Medical Association, addressed the Society and discussed Public Relations, Fee Schedules and the H.M.S.A.

Robert F. Cole, M.D.
Secretary

THE HONOLULU COUNTY MEDICAL LIBRARY

MRS. ETHEL HILL, *Librarian*

MISS KATHERINE NEWHALL, *Assistant Librarian*
PHONE 65370

8:00 a.m.-4:30 p.m., and 7:30 p.m.-9:30 p.m.
Monday through Friday

Closed Saturdays at noon and Sundays
Closed all day and evening on National holidays
and at noon on Territorial holidays.

RECENT ACQUISITIONS

Anatomy & Physiology

De Robertis, E. D. P. *General cytology.* c1948. (gift of publisher)

Farris, E. J. *Anatomy and physiology laboratory guide.* 5th ed. c1949. (from Nurses' Association)

Stackpole, C. E. *Laboratory manual in anatomy and physiology.* 2nd ed. c1948. (from Nurses Association)

Cancer

Donner Foundation. *Index to the literature of experimental cancer research 1900–1935.* c1948. (gift of Donner Foundation)

Pack, G. T., ed. *Cancer of the esophagus and gastric cardia.* c1949. (gift of publisher)

Cardiology & Hematology

Lewis, Sir Thomas. *Electrocardiography and clinical disorders of the heart beat.* c1949.

Sturgis, C. C. *Hematology.* c1948. (gift of publisher)

U. S. War Dept. *Notes on cardiology in aviation medicine.* 1940. (gift of Dr. Rodney T. West)

Dermatology

Becker, S. W. *Modern dermatology and syphilology.* 2nd ed. c1947. (gift of publisher)

Goodman, Herman. *Cosmetic dermatology.* c1936.

Ormsby, O. S. *Diseases of the skin.* 7th ed. rev. c1948.

Sutton, R. L. *Handbook of diseases of the skin.* c1949. (gift of publisher)

Infectious Diseases

Dubos, R. J., ed. *Bacterial and mycotic infections of man.* c1948. (gift of National Foundation of Infantile Paralysis)

Rivers, T. M., ed. *Viral and rickettsial infections of man.* c1948. (gift of National Foundation of Infantile Paralysis)

Laboratory technique

Hepler, O. E. *Manual of clinical laboratory methods.* 4th ed. c1949. (gift of publisher)

Leprosy

Damon, E. M. *Siloama.* c1948. (gift of Dr. Norman Sloan)

Keffer, Luiza. *Indice bibliografico de lepra,* 1900-1943. c1948.

Muir, Ernest. *Manual of leprosy.* 1948.

Neurology & Psychiatry

Anderson, C. M. *Emotional hygiene.* 4th ed. rev. c1948. (from Nurses' Association)

Association for Research in Nervous and Mental Disease. *The frontal lobes.* v. 27. c1948.

Dunbar, Flanders. *Synopsis of psychosomatic diagnosis and treatment.* 4th ed. rev. c1948.

Egel, P. F. *Technique of treatment for the cerebral palsy child.* c1948. (gift of publisher)

Freud, Sigmund. *The interpretation of dreams.* 3rd ed. rev. 1931.

Henderson, D. K. *Psychopathic states.* c1939. (from Bureau of Mental Hygiene)

Hunt, J. McV., ed. *Personality and the behavior disorders.* 2 v. c1944.

Livingston, W. K. *Pain mechanisms.* c1943.

Lyons, W. R. *Atlas of peripheral nerve injuries.* c1949. (gift of publisher)

Plant, J. S. *Personality and the cultural pattern.* c1937. (from Bureau of Mental Hygiene)

Sadler, W. S. *Adolescence problems.* c1948. (gift of publisher)

Shadel Sanitarium. *Alcoholism—Collected papers.* v. 1. 1948. (gift of Shadel Sanitarium)

Thorner, M. W. *Psychiatry in general practice.* c1948. (gift of publisher)

Nursing

Committee on the grading of nursing schools. *Nursing schools.* c1934. (from Nurses' Association)

Committee to study administration in schools of nursing. *Fundamentals of administration for schools of nursing.* c1940. (from Nurses' Association)

Falls, F. H. *Obstetric nursing.* c1946. (gift of Library of Hawaii)

Goostray, Stella. *A textbook of chemistry.* 5th ed. c1940. (from Nurses' Association)

Jamison, Sara. *Solutions and dosage.* c1947. (from Nurses' Association)

National League of Nursing Education. *A study of pediatric nursing.* c1947. (from Nurses' Association)

National League of Nursing Education. *The contribution of physical therapy to nursing education.* c1948. (from Nurses' Association)

National League of Nursing Education. *Guidance programs for schools of nursing.* c1946. (from Nurses' Association)

Render, H. W. *Nurse-patient relationships in psychiatry.* c1947.

Shepard, Katharine. *Textbook of attendant nursing.* 3rd ed. c1942. (from Nurses' Association)

Ophthalmology

Spaeth, E. B. *Principles and practice of ophthalmic surgery.* 4th ed. rev. c1948.

Wiener, Meyer, ed. *Ophthalmology in the war years.* 2v. c1946-48.

Orthopedics

Bick, E. M. *Source book of orthopaedics.* 3rd ed. c1948.

Coley, B. L. *Neoplasms of bone.* c1949.

Shands, A. R. *Handbook of orthopaedic surgery.* 3rd ed. c1948. (gift of publisher)

Pediatrics

Ebert, Elizabeth. *The Brush Foundation study of child growth and development.* 1. Psychometric tests. 1943. (gift of Dr. Rodney T. West)

Greulich, W. W. *Somatic and endocrine studies of puberal and adolescent boys.* 1942. (gift of Dr. Rodney T. West)

Koshuk, R. P. *Social influences affecting the behavior of young children.* 1941. (gift of Dr. Rodney T. West)

Lerner, Eugene, ed. *Methods for the study of personality in young children.* 1941. (gift of Dr. Rodney T. West)

Roberts, K. E. *Persistence and change in personality patterns.* 1943. (gift of Dr. Rodney T. West)

Surgery

Bonney, Victor. *A textbook of gynaecological surgery.* 5th ed. 1948.

Meleney, F. L. *Clinical aspects and treatment of surgical infections.* c1949. (gift of publisher)

Therapeutics

Burn, J. H. *The background of therapeutics.* 1947.

Licht, Sidney, ed. *Occupational therapy source book.* c1948. (gift of publisher)

Miscellaneous

Anderson, W. A. D., ed. *Pathology.* c1948. (gift of publisher)

Bachmeyer, A. C., ed. *Hospital trends and developments.* (1940-1946) (from Hospital Association)

Clowes, William. *Profitable and necessarie booke of observations.* 1945. (gift of Chauncey Leake)

DeGowin, E. L. *Blood transfusion.* c1949. (gift of publisher)

Dubois, Albert. *Diseases of the warm climates.* c1948.

Fones, A. C., ed. *Mouth hygiene.* 4th ed. rev. c1934. (gift of Miss McGuiness)

Hawaii (Terr.) Laws, statutes, etc. *Session laws of Hawaii, 1947.* 1947.

Herrmann, G. R. *Clinical case-taking.* 4th ed. c1949. (gift of publisher)

Kleiner, I. S. *Human biochemistry.* 3rd ed. c1948. (gift of publisher)

Mitscherlich, Alexander. *Doctors of infamy.* c1949. (gift of publisher)

Ruff, Siegfried. *Compendium of aviation medicine.* 1942. (gift of Dr. Rodney T. West)

Thomson, Sir St. Clair. *Diseases of the nose and throat.* 5th ed. n.d. (gift of publisher)

Titus, Paul, ed. *Directory of medical specialists.* v.4. c1949.

U. S. War Dept. Surgeon General. *Index catalogue of the Library of the Surgeon-General's Office.* U. S. Army. 4th series. v.10. 1948. (gift of Col. Jones)

Veterans Administration. *Technical Bulletins,* Series 10. v.2. 1948. (gift of Veterans Administration)

Wilson, C. C., ed. *Health education.* 4th ed. (gift of publisher)

Wiprud, Theodore. *The business side of medical practice.* 2nd ed. c1949. (gift of publisher)

* * *

It may be interesting to note that the volumes in the library now total over 11,000. 279 members of the Medical Society are registered borrowers and 496 nurses (including student nurses). Daily attendance figures show that visits of the doctors to the library increased 1500 over last year, and nurses proportionately. Over 7500 books and journals were borrowed in 1948 and over 13,000 used in the library. These figures show an amazing increase in demand for library services and prove that the doctors and nurses are becoming more conscious of the growing resources of the collection.

BOOK REVIEWS

Doctors of Infamy, The Story of the Nazi Medical Crimes, by Alexander Mitscherlich, M.D., 172 pages, 16 photographs, price $3.00.

Even in an age of horror, this book was a depressing shock. "Truth is more amazing than fiction" could well be paraphrased here as "the truth is more horrifying than the bloodiest murder mystery" and more unbelievable. The actors were high-ranking men of science, a professor of anatomy in a famous medical school, a top surgeon in a large Berlin hospital, and many doctors who had received the most intensive education and had had long experience with thousands of patients.

As the pages turn you see them sitting calmly taking the pulse of two Russian officers, forced nude into an ice vat. They watch the Russians hour after hour as life is slowly snuffed out. You read of them amputating the leg of a healthy Ukrainian girl to see if it could be transplanted, and of another whose shoulder girdle was removed. You read of a beautiful twenty-one-year-old college student dying in dreadful agony after being injected with gas bacilli. But these samples represent only a few of the thousands who died agonizing, macabre deaths in the name of medical experiment.

You read of the killing by injections of many half-Jewish children, twenty of them girls, and the killing of 35,000 Poles because they had tuberculosis; the sterilizing of young Jewish women by the injection of irritating fluids into their uteri; and the castration, by x-ray and surgery, of men who were then forced to continue working. Those who dropped were gassed. You read of children being given intravenous injections of tubercle bacilli and dying weeks later of miliary tuberculosis; young women being injected with pus, and men with blood, from typhus patients; injection of unwanted ones with gasoline and phenol; of doctors being ordered by "high authority" to certify deaths of murdered people as deaths from natural causes. You read of a professor of anatomy wanting a collection of skulls of one hundred and fifty young Jewish-Bolshevik men and women, and writing out careful instructions as to how he wanted the heads severed and preserved. The gruesome story of how these were killed in groups of fifteen and twenty by young S.S. men who stripped the women and pushed them into a lighted gas chamber is a story of hell that even Dante could not imagine. But why go on, except to add perhaps a note on perverted sex touches; such as a man iced to unconsciousness, then squeezed between two nude female prisoners to see if he would warm up as rapidly with them as with hot water. When some became conscious they were then forced to coitus to note its effect. One horror page follows another.

What is the significance? Albert Deutsch wrote: "They produced not a single new cure, nor did a single important discovery result from the experiments performed on their human guinea pigs." It may signify that we have put too much value on "book" intelligence and the I.Q. It may indicate how debased the highest mental acumen can be when not balanced by emotional and spiritual values. The book may be the strongest indictment yet against "state medicine." The doctors were employed by the state and had to obey orders. It emphasized the danger of dictatorship, and how quickly benevolent paternalism (if the former is absolute) can deteriorate into fanatic oppression. The human brain has not yet evolved to a point where anyone or group can be trusted with power over life or his fellow man.

It certainly exposed the myth of the German superman and the weaknesses in his "scientific thoroughness." It fits in well as an end result of the unscientific and false dogma of Freud and his ridicule of all higher and decent emotions. It did suggest the danger of "an organizational stage of civilization in which the individual no longer makes the ultimate ethical or moral decisions, nor answers for them." And it warns us that, "freedom frivolously surrendered comes home to roost in the shape of tyranny. Whoever squanders his liberty earns only contempt." Perhaps we shouldn't omit the fact that these horrors performed by doctors — seven of whom were hanged — changed for the first time in two thousand years, the Hippocratic oath. It now includes, "I will not permit consideration of race, religion, nationality, party politics or social standing to intervene between my duty and my patient. . . . Even under threat I will not use my knowledge contrary to the laws of humanity."

After this book, all doctors must hang their heads in shame, talk less pompously, work harder and in service to their communities help wipe off this blot on the escutcheon of medicine. That, at least, is one evaluation.

NILS P. LARSEN, M.D.

Diseases of the Nose and Throat, a Textbook for Students and Practitioners. By Sir St. Clair Thomson, M.D., and V. E. Negus. Fifth Edition. 13 Colour, 20 Radiographic and 11 other Plates and 369 figures. 1004 pages. Price $16.00.

This 1000-page textbook for students and practitioners is the culmination of 38 years of steering by the same "skipper," Sir St. Clair Thomson. He leaves nothing to doubt; even references are seldom over 10 years old; none over 20.

Throughout, the author assumes a mutuality of interest in, and the intelligent application of, the latest concepts, stressing principles of defense against infection, especially by chemotherapy and antibiotics.

Chapters on allergy and cancer of the larynx are elaborated upon, while less attention is given to atrophic rhinitis and syphilis.

I felt that the text was a bit too all-inclusive. For instance, he might well have left out Chapter LXIII, "The General Treatment of Syphilis." But the book merits the wide acceptance given it.

CLARENCE W. TREXLER, M.D.

Handbook of Diseases of the Skin, by Dr. Richard L. Sutton and Dr. Richard L. Sutton, Jr., 1057 illustrations, 749 pages. Price $12.50.

This attractive book is another of the Sutton series on skin. It represents an effort to present the field of dermatology succinctly for the student, in easy reference form for the general practitioner, and in sufficient detail to please the dermatologist. It can be recommended for all of these readers.

The student will find useful the illustrations in the section on anatomy. The book will be of aid to the practitioner in that it is profusely illustrated, modern, and has well organized instructions for the management of several common skin conditions. The figure suggesting causes of contact dermatitis should be helpful. The specialist is offered an up-to-date bibliography which will aid him in his study of the literature.

While the book is a valuable contribution to the field certain sections could have been organized for greater clarity and written in a less cumbersome style. For example, in the discussion of syphilis, while new techniques are presented, many of the old ones are retained. This may be a source of confusion to medical students. Readers in Hawaii will wish that in the section on leprosy the authors had used newer terminology, and that their statement on lepromin had been different.

SAMUEL D. ALLISON, M.D.

The Business Side of Medical Practice (2nd Edition), by Theodore Wiprud, Executive Director and Secretary of the Medical Society of The District of Columbia and Managing Editor of the Medical Annals of the District of Columbia. 232 pages, 22 figures. Price $3.50.

This book covers everything from personal efficiency and office management to investments and public speaking, which is quite an assignment for only 232 pages. A better title for the book would have been "A Business Primer for New Doctors," for its main appeal is to the new doctor just starting his practice. Even then, some of the subjects are covered so sketchily one wonders why they were included at all.

The first edition came out around ten years ago and had a fair sale, probably because there is such a dearth of books on the subject. This second edition has been brought up to date, but it still does not live up to its title. To the new doctor just starting out it is worth reading, but the older doctor can get more by sticking to his "Medical Economics."

JOHN R. SEDGWICK

The Medical Clinics of North America. Chicago Number. 292 pp. Price $18.00 per year. W. B. Saunders Company, Philadelphia and London, January, 1949.

Nineteen articles by sixteen Chicago dermatologists and their associates, plus (by invitation) Drs. Paul O'Leary of the Mayo Clinic and Arthur Curtis (and Robert Grekin) of the University of Michigan, comprise this interesting and stimulating dermatologic issue of the Medical Clinics of North America. Some of the articles are definitive and authoritative monographs: e.g., Dermatomyositis by O'Leary; Sarcoidosis by Curtis and Grekin; Dermatitis exfoliativa, by Senear; Cutaneous allergic disorders, by Rostenberg; Pemphigus, by Rattner. Others are practical, didactic articles for the practitioner: e.g., Management of atopic dermatitis, by Hetreed; Management of nevi, by Webster. James Mitchell discusses the recently observed "base coat" dermatitis of the nail beds, with excellent photographs; Scull describes cutaneous tuberculosis in the Negro; Finnerud discusses Bowen's disease; Ebert makes all clear about the two herpes', simplex and zoster; Edward Oliver and Fay Squire discuss skin cancer and its treatment; Graffin *et al.* present a study of disseminated lupus erythematosus; and Becker discusses neurodermatitis and pruritus.

There is much of value in this issue of the Clinics for both the specialist and the general practitioner.

HARRY L. ARNOLD, JR., M.D.

Clinical Aspects and Treatment of Surgical Infections, by Frank Lamont Meleney, M.D., F.A.C.S., with a Foreword by Allen O. Whipple, M.D., 840 pages, 287 figures. (1949) Price $12.00.

This volume by Dr. Meleney is essentially a record of his life's work in the field of surgical infections. During these years he has directed a bacteriological laboratory devoted to the study of the organisms found in both surgical and traumatic wounds. New and previously undescribed types of organisms have been isolated, their laboratory characteristics identified, the clinical features distinguishing the type of infection produced by them studied and, most important of all, appropriate therapeutic measures tested and proved to be efficacious. For example, the chronic, burrowing, undermining ulcer produced by the microaerophilic streptococcus was identified as a specific entity and the well-known zinc peroxide therapy developed.

The essence of the book is presented in the first chapter, entitled Physiological Considerations in Surgical Infections. In it the principles of physiological antisepsis are enumerated, the physiological concepts of chemotherapy explained, and the physiological principles of surgical technic developed. This concise discussion of the importance of preventing and treating surgical infection from a physiological point of view is invaluable.

From this introduction, surgical infections as they are found in each system of the body are described. The clinical picture and the bacteriology of the different types are given and the various therapeutic measures discussed completely. Definite recommendations as to the procedures of choice are given without getting bogged down in controversial matter or technical detail. There is no tendency to present merely a rehash of past teachings; instead, for each type of infection specific measures are proposed, highly documented by illustrative, detailed case records from the files of the author and his associates. Finally, many good illustrations help to clear up the descriptive gaps where the word picture fails.

Certainly this monograph can be highly recommended as a complete reference work for every physician who has to deal with surgical infections.

G. C. FREEMAN, M.D.

Atlas of Peripheral Nerve Injuries, by William R. Lyons, Ph.D., and Barnes Woodhall, M.D., 339 pages. Price $16.00.

The recent war furnished a unique opportunity for the study of large numbers of traumatic wounds. Dedicated to the men who sustained these wounds, this book makes the most of this opportunity and is a classic work on the subject of the histologic and pathologic response of peripheral nerves to trauma. The lack of any similar work on the subject makes the book even more valuable and timely.

During the years 1943, 1944, and 1945, first at Walter Reed General Hospital and then at Halloran General Hospital literally hundreds of specimens of nerves, representing the mirror images of the ends of nerves actually sutured, were collected, described and photographed. Sutures done early in this period could be evaluated later by referring to the specimens of the approximated ends. From this mass of material the authors over the past three years have constructed a book of beautiful photomicrographs, carefully arranged and concisely and fully explained. Pathologic evidence is presented clearly of the changes which take place in nerves from all types of injuries and the speed with which they take place, so that an intelligent method of handling patients is defined. The causes of failure in nerve sutures are distinctly shown.

But this is more than an atlas. Numerous case histories are presented along with the photomicrographs representing the course of treatment which may in some patients have spread over years. Actually, through the Peripheral Nerve Suture Registry, it is hoped a follow up can be maintained indefinitely. The literature pertinent to subjects under study in various sections is reviewed and summarized. The problems of "Stretch palsy" and nerve graphs are covered in detail with pathologic specimens to elucidate the problems involved. This beautiful piece of work is sure to have a lasting appeal to students, teachers, surgeons and pathologists alike.

JOHN J. LOWREY, M.D.

Blood Transfusion, by Elmer L. DeGowin, M.D., 587 pages, 200 diagrammatic drawings. (1949) Price $9.00.

The authors of this book are all three internists who have supervised transfusion services, and have, of course, had many patients who received infusions of blood and blood derivatives. They have seen this procedure develop from a small beginning to a medical specialty.

Heretofore the great majority of knowledge concerning blood transfusion has had to be gleaned from the literature, since no one book contained all the information necessary for the physician interested in this subject. This volume meets this need, and presents in a clear, concise manner the basic knowledge of importance to all physicians, and technicians associated in any way with the transfusion of blood and blood derivatives.

This book is recommended for reading and study by all physicians who use blood as a therapeutic agent.

LEON E. MERMOD, M.D.

Modern Dermatology and Syphilology, by S. William Becker, M.D., and Maximillian Obermayer, M.D. Second Edition. 1017 pp. with 461 figures and 37 color plates. Price $18.00. J. B. Lippincott Company, Philadelphia, London and Montreal, 1947.

The enlarged and revised second edition of this excellent teaching textbook of dermatology is distinguished by the outstanding quality of three sections in particular: those on leprosy, on tropical dermatoses, and on the neurodermatoses. Leprosy, though the authors call it by the Greek word for "scaly disease," i.e., *lepra,* is correctly described in accordance with Hansen's dual biologic classification instead of, as in most dermatologic texts, Danielssen's three-way anatomic one. The tropical dermatoses section is enriched by both text material and illustrations obtained from a variety of South and Central American sources by the junior author. The section on neurodermatoses and their management is unexcelled for clarity and practical value in any textbook with which I am familiar.

The 32 pages of index and the detailed summary at the head of each chapter make the book easy to use, especially for the student. The illustrations are numerous and excellent, and charts have been employed in several places to summarize and clarify the text. Good bibliographies follow each chapter, divided according to subject. References are as recent as 1945 (publication was in 1947). The text is still one of the best for students, and is becoming a strong contender for use by practitioners as well.

HARRY L. ARNOLD, JR., M.D.

Essentials of Gynecologic Endocrinology. By Gardner M. Riley, Ph.D., 1948, 205 pages, price $3.00.

This is an excellent compact manual with much practical and valuable information for the busy practitioner, especially the obstetrician and gynecologist. Written in a brief and clear manner, the author presents only the more accepted theories and methods of therapy.

The book is divided into three sections: endocrine physiology; clinical; diagnostic procedures, sex hormone chemistry, and endocrine preparations. The presentation is up-to-date and includes estrogen therapy in abortion, estrogen and progesterone therapy in menstrual dysfunctions, pregnandiol test (Guterman) for pregnancy, etc. There is a chapter dealing with commercial endocrine products which summarizes the forms of various preparations, their source and relative potency.

Definitely a good book in the office.

K. S. TOM, M.D.

Physicians' Desk Reference to Pharmaceutical Specialties and Biologicals. In Four Sections. Medical Economics, Inc., Rutherford, New Jersey, 1949.

The druggist has for a long time felt the need for such a book, and has had one. The tremendous increase in the number of drugs whose chemical names occupy several lines on a label, and whose common names differ according to the manufacturer who makes them, has created an urgent need for such a volume as this. If, for example, you have read an article which tells about a useful mercurial diuretic, but you have forgotten the name, you may look under "mercurial diuretics" in this book and find a list of all of the mercurial diuretics, and most of the available information concerning them. If you know the chemical name and you don't know what it is for, you may look up the chemical name in this book and obtain all the information available concerning it. It is astonishingly up to date, and the pharmacological and therapeutic information contained in it, from a relatively superficial examination of the volume, appears to be excellent. It seems to be a very useful book for any physician to own.

H. L. ARNOLD, SR., M.D.

Practical Aspects of Thyroid Disease, by George Crile, Jr., M.D., F.A.C.S., 355 pages, 101 figures. (1949) Price $6.00.

This book represents an important contribution to the clinical literature of a category of diseases, doubly important because of the increasing incidence of those diseases and because of rapid progress in therapeutic methods of relieving thyroid disorders.

In simple and logical phrases, Dr. Crile presents the recent advances in the concept of thyroid physiology and the progress in medical and surgical management resulting from the better understanding of the normal and pathologic physiology of this gland.

The subject matter is presented through an orderly outline and in a manner that makes reading easy and rapid. The clinician who has occasional or frequent contact with patients suffering from disorders of the thyroid will find this book an invaluable reference.

JAMES W. CHERRY, M.D.

Clinical Case Taking, Guides for the Study of Patients, by George R. Herrmann, M.D., Ph.D., 4th Edition, 1949, 240 pages. Price $3.50.

This book contains a detailed outline for a general workup of the patient plus approaches for special examinations of the various systems, pediatrics, surgical and mental cases. It can be highly recommended for the third year student commencing his clinical medicine. To the more advanced student, to the general practitioner, and to the specialist confronted with a problem outside his field, it offers a handy reference.

RAYMOND M. DEHAY, M.D.

PSYCHIATRIC COMMENT

THE MENTAL HYGIENE SOCIETY OF THE TERRITORY OF HAWAII

The Mental Hygiene Society of the Territory of Hawaii had its beginning in the pioneer work of Miss Margaret M. L. Catton. Through her efforts a psychiatric social worker was brought to the Territory in the fall of 1935 to work at the Queen's Hospital. This worker, Miss Florence Brugger, did education in the field of mental hygiene along with her job of hospital social work. In 1937 the University of Hawaii brought Dr. Franklin G. Ebaugh, professor of psychiatry at the University of Colorado Medical School, to the Islands for a series of lectures on mental hygiene at summer school. Miss Catton and Miss Brugger enlisted the help of Dr. Robert Faus to look into the possibilities of securing Dr. Ebaugh's services to make a mental hygiene survey of the Territory. Through Dr. Faus' efforts the Public Health Committee of the Honolulu Chamber of Commerce agreed to pay the costs of such a survey. A joint committee of the Chamber of Commerce and the Psychiatric Committee of the Hawaii Territorial Medical Association was formed with representatives of other private and public organizations. This committee was to plan and work with Dr. Ebaugh. Miss Brugger was loaned by Queen's Hospital to the project and worked with Dr. Ebaugh during the entire period of the study.

At the end of his survey Dr. Ebaugh made the following recommendations:

1. Recodification of existing laws regarding the treatment of mental patients.
2. Reorganization of administration and treatment of mental patients.
3. The creation of a territorial psychiatric clinic.
4. The development of psychiatric departments and facilities in general hospitals in the community.
5. Community education.
6. Organization of a mental hygiene society.

In the summer of 1938 the Chamber of Commerce recalled Dr. Ebaugh to effect his third recommendation, the organization of a psychiatric clinic. This project was to be financed through the Chamber of Commerce until such time as it could be placed under Territorial jurisdiction. In the 1939 legislature a bill was passed creating the Bureau of Mental Hygiene within the department of health.

During this entire period, the Psychiatric Committee of the Hawaii Territorial Medical Association in cooperation with the Honolulu Council of Social Agencies had been formulating plans for the organization of a territorial society for mental hygiene. The war disrupted these plans for a time but in August 1942 the Society finally took form. In 1946 a full-time executive secretary was employed to work with the Board of Directors and the standing committees set up by the constitution: Education, Legislation, Research and Rehabilitation.

The purpose of the Society is primarily education. This is accomplished by lectures, radio programs, movies and the distribution of pamphlet material. The organization does not offer treatment service, but provides information about proper private and public facilities. It acts as a clearing house and coordinator for mental hygiene activities of other community agencies and civic groups.

The society's expanding program of education and coordination is designed to understand and meet the mental health needs of men and women in all age groups, with particular emphasis on the mental health needs of the normal individual. One of the major projects of the Society is to encourage people who need psychiatric attention to get it early, in order to prevent a severe illness. An increasing number of patients are going voluntarily to psychiatrists and psychiatric hospitals. This shows the result of an educational program emphasizing the importance of early recognition and prevention. The Society endeavors to bring an appreciation of good mental health in the lives of children through contacts with parents, teachers, and young high-school and college students.

The Mental Hygiene Society is a democratic, social and educational force in the community which seeks to insure every person an opportunity to develop adequately his capacities as an individual.

MARGARET HACKFIELD
Executive Director

NOTES AND NEWS

PERSONALS

Dr. Stanley M. Saiki, a native of Kapaa, Kauai, has opened his offices in Kaimuki, Honolulu, in association with Dr. Isami Tashima, for the general practice of medicine and surgery. Dr. Saiki, who is a graduate of the University of Hawaii, received his M.D. from Temple University, Philadelphia, in 1945 and interned at the St. Joseph Hospital, Philadelphia. Following this he served as surgical resident at this hospital for fifteen months and then for five months at the St. Francis Hospital, Honolulu.

The St. Francis Hospital has added Dr. William A. Conover, of Los Angeles, California, to the residency staff. Dr. Conover is a graduate of the St. Louis University School of Medicine in 1946 and interned at the Oakland Naval Hospital. After this he spent two years in the Marshall Islands in the Navy.

The Children's Hospital has secured the services of Dr. William Stengel, of Pittsburgh, as a resident in pediatrics. He is a graduate of the University of Pittsburgh and interned at the Mercy Hospital in Pittsburgh. He served in the Pacific in the Navy during 1946 to 1948.

The Kapiolani Hospital has a new resident in obstetrics and gynecology in the person of Dr. Olas H. Christofferson, of Seattle, Washington. He received his M.D. in 1946 from the George Washington University and interned at the Swedish Hospital, Seattle, where he also had a residency in obstetrics.

Recent arrivals to the medical profession in Honolulu include a son, Daniel, born to Dr. and Mrs. Frank Gaudin on March 6 at The Queen's Hospital; a son, Robert Edgar Kulani, born to Dr. and Mrs. Edgar S. Childs, on March 6, at The Queen's Hospital; a daughter, Dawn Louise, born to Dr. and Mrs. Keith Kuhlman, on April 17, at the St. Francis Hospital; and a daughter, their third child, Patricia Leilani, born to Dr. and Mrs. Richard Horio on April 25, at The Queen's Hospital.

On Maui, a daughter, Margaret Lawlor, was born to Dr. and Mrs. John Sanders on April 23 at Paia Hospital.

Dr. Rogers L. Hill, of Honolulu, is taking a four months' mainland trip, during which time he took the second part of the American Board of Surgery examinations in San Francisco. He is visiting various medical centers in addition to his first trip since 1936 to his former home in Alabama.

Dr. Ching Tung Liu, of Honolulu, has been appointed chief of the neurosurgical service at the Veterans' Hospital in Canandaigua, New York.

Dr. Phillip S. Arthur, of Honolulu, has returned from a mainland trip, during which he attended the American Medical Association meeting and visited several radiological centers.

Dr. Joseph E. Strode, of the Clinic, has returned from a meeting of the American Surgical Association in St. Louis and from visits to various surgical clinics in New York and elsewhere.

Dr. Joe Lucas, of Wahiawa, has returned from post-graduate course in surgery at Denver, Colorado, under Dr. Kenneth Sawyer. He also studied for two months at the Mayo Clinic, Rochester, Minnesota.

Dr. Ted A. Casey has returned to Honolulu after an absence of four and a half years and is specializing in orthopedic surgery, with offices in the Young Building. Dr. Casey is a graduate of the University of Colorado Medical School in 1939 and interned at The Queen's Hospital from 1940 to 1942. He served as plantation physician for several years prior to serving in the U. S. Navy in 1945-46. His graduate training in orthopedics was at the New York Orthopedic Hospital and while in the Navy at the St. Albans Hospital, Long Island.

Dr. Dorothy Natsui has opened her offices for the practice of psychiatry at 1507 Kapiolani Blvd., Honolulu. She was previously at the Territorial Hospital, Kaneohe, for five years, as hospital physician. She was graduated from the Loyola University Medical School in Chicago and took post-graduate work in child psychiatry at the Johns Hopkins Hospital, Baltimore.

Dr. J. Robert Jacobson, formerly of Chicago, Illinois, has opened his offices in the Alexander Young Building, Honolulu, for the practice of neuropsychiatry. He was formerly Clinical Director at the Territorial Hospital, Kaneohe. He was graduated from the University of Illinois Medical School in 1926, and served on the staff of the Elgin State Hospital from 1930 to 1942. He became a diplomate of the American Board of Psychiatry in 1941. During the last war he served as a Lieutenant Commander in the Navy and was chief of neuropsychiatry at the Aiea Naval Hospital.

Dr. Charles C. Custer has opened his offices in Kailua, Oahu, for the general practice of medicine and surgery. He recently completed a year as resident at the St. Francis Hospital, Honolulu. Dr. Custer was graduated from the University of Pittsburgh Medical School in 1943 and interned at the Hollywood Presbyterian Hospital, following which he took a residency in surgery and anesthesia at the same hospital. He was discharged from the Army as a Captain after serving for two years in the Pacific area.

Dr. Gardner Black has moved from Honolulu to Kamuela, Waimea, Hawaii, where he is physician to the Parker Ranch and is in private practice also. His many friends on Oahu wish him much happiness in his new location.

Attending the U. S. Army Medical Center course at Walter Reed Hospital, Washington, D. C. were Dr. Robert Faus, Dr. Alvin Majoska and Dr. R. P. Wipperman, of Hilo. This course, "The Radiological Effects of Atomic Bursts," was given primarily for National Guard Officers and civilian defense officials. Dr. Faus also attended the special meeting of the American Medical Association State Directors of Emergency Medical Service, in Chicago, as director of the Honolulu medical civilian defense unit. He was a guest at the American College of Physicians meeting in New York City.

Dr. S. Mizuire of Hilo landed a 559 pound swordfish off the Kona coast in April.

ALFRED HERBERT WATERHOUSE, M.D.

1877-1948

Dr. Alfred Herbert Waterhouse died at a local hospital December 24, 1948 from Parkinson's disease after an illness of many months. Dr. Waterhouse was born on August 12, 1877 at Cedar Rapids, Iowa. He received his A.B. from Princeton and his M.D. from Rush Medical College. He came to Kauai after an internship at the Silver Cross Hospital.

Dr. Waterhouse began his medical practice at Koloa in October, 1907. He followed in the footsteps of his grandfather James W. Smith, and his uncle Jared K. Smith. James W. Smith came to the islands in 1842 and was the second physician to practice on Kauai. Jared Smith worked with his father until the latter's death in December, 1887. Jared was the doctor in Koloa then until his death in 1897.

When Dr. Waterhouse came to Koloa in 1907 as doctor for the Koloa Sugar Company, there was no hospital or trained nurse. The so-called hospital, consisting of two camp houses put together, was in charge of an untrained Japanese man who couldn't read English. It was located near the plantation office. There was also a small dispensary with a limited amount of drugs.

All transportation was by horse-back or carriage until May of 1909, when Dr. Waterhouse got his first automobile. This was a sporty, two-cylinder Maxwell, a bright red, two-passenger model with no top or windshield, and headlights lit by acetylene gas. Since few roads were macadamized at that time, the Maxwell often got stuck in the mud on the up-hill roads leading out of Koloa, and the doctor would have to walk home, saddle up his horse and start out again.

Despite hardships and exceedingly long hours Dr. Waterhouse had the foresight and initiative to inaugurate methods and practices which contributed to the advancement of medicine on Kauai. Thus a 21 bed hospital and 4 cottages in the yard, in which to care for tuberculous cases, were built in Koloa during the time that Charles Wilcox was manager. In 1926 Dr. Waterhouse added a physiotherapy department to the Koloa hospital at his own expense. He secured Koloa's first resident dentist when Dr. Justine Smith came to Kauai in April, 1921, and he started the first pathological laboratory on Kauai in May, 1928. Dr. A. M. Ecklund, of St. Louis, Missouri, was secured to take charge of it. In December of 1928 Dr. Waterhouse was appointed a member of the board of the Samuel Mahelona Memorial Hospital for tuberculosis and held that position until December, 1941. In 1925 he started a "Baby Clinic" and a little later a prenatal clinic for mothers. He was the first president of the Kauai Tuberculosis Association.

Outside of his medical practice, he had many other interests. In January, 1934, he was appointed to the Board of Education as Commissioner for Kauai, and continued in this position until he resigned in April, 1944. He was a member of Koloa Union Church, where he served on the Board of Deacons and also as a trustee. He enjoyed good music and was an amateur cellist. He taught a Sunday School class of eighth grade boys, and often took his class on hikes and trips.

In the days when roads were poor and cars were few, the doctor instituted an annual outing for the people of Koloa. Through the plantation manager he obtained the use of a locomotive, an engineer, and cane cars to take the people to Poipu on the Fourth of July. He was a member of the first board for Kukuiolona Park when Walter McBryde deeded the park to the County of Kauai. He was always interested in the Boy Scouts, and was on the Scout Board for several years. He also served for several years on the Hawaiian Board, as well as the Y.M.C.A. and Salvation Army boards.

Dr. Waterhouse is survived by his widow, Mrs. Mabel Palmer Waterhouse, three children, and eleven grandchildren.

WEBSTER BOYDEN, M.D.

DAVID LIU, M.D.

1901 - 1949

The many friends of Dr. David Liu, physician for the McBryde Sugar Company, Kauai, were grieved to learn of his sudden death from coronary thrombosis on February 9, 1949.

Dr. Liu was born in Honolulu on July 24, 1901. He received his medical education at the College of Medical Evangelists, Los Angeles, graduating in 1930. For some years following his graduation he was on the staff of the Emergency Hospital in Honolulu. Subsequently he spent a year on the staff of Kalaupapa Settlement on Molokai. Returning to Oahu, he saw a year's service as resident physician at the Territorial Hospital. In 1939 Dr. Liu took an extended course at the Graduate School of Medicine, University of Pennsylvania, majoring in internal medicine. In July, 1940, he became assistant medical director at Samuel Mahelona Memorial Hospital on Kauai, a position which he held until August, 1944, when he resigned to enter private practice at Kapaa, Kauai. After some months of successful practice at Kapaa, Dr. Liu was offered the position of plantation physician for the McBryde Sugar Company, Kauai. He held this latter position until the time of his death.

Professionally, Dr. Liu was a conscientious, hard-working physician. He owned an extensive library and subscribed to numerous journals. It was my pleasure to be associated with him during his last three years on the staff of Mahelona Hospital. Quiet and unassuming, he was a dependable physician and a loyal friend.

Dave—as he was affectionately called by his friends—was an individual, a man of varied in-

terests. He was an amateur magician of considerable skill. He was a good machinist and possessed a steam-fitter's license. He had an aviator's license and flew his own plane for several years before his death. He had studied calligraphy in his earlier days and could write in a beautiful hand. He was a successful amateur gardener, and nothing gave him more pleasure than to raise a prize crop of tomatoes or peanuts. He was also an ardent rod-and-line fisherman, an enthusiastic advocate of what Isaac Walton termed "the contemplative man's recreation."

Above all, Dave was a devoted family man and his memory will be forever revered by his surviving wife, Phoebe, and by his four children, all boys and all of pre-school or school age. I take this opportunity of paying Dave the tribute which he would value above all others: He was a very human, human being. Those of us who fished with him will miss him when we go fishing.

D. R. CHISHOLM, M.D.

SOCIETY OF NEUROLOGY AND PSYCHIATRY OF HONOLULU

The physicians of Oahu interested in psychiatry and neurology have gathered to form the new "Society of Neurology and Psychiatry of Honolulu." The formation of such a society has been under consideration for many years, and the first meeting was held October 20, 1948. Following three meetings of organization, a constitution and by-laws have been adopted. Temporarily elected officers of the society are: President: DR. RICHARD D. KEPNER; Secretary-Treasurer: DR. H. JOSEPH SIMON; Chairman of Committee of Constitution and By-laws: DR. THOMAS S. BENNETT; Chairman of the Program Committee: DR. H. JOSEPH SIMON. It has been arranged that programs relating to subjects of neurology and psychiatry and the application of these specialties to general practice in medicine be presented at the meetings. Other members of the medical profession are invited to attend the meetings, which are held every two months on the second Wednesday.

COURSE IN GASTROINTESTINAL SURGERY

The National Gastroenterological Association, in cooperation with the Postgraduate Division of Tufts College Medical School and the First and Second Surgical Services of the Boston City Hospital, announces a course in gastrointestinal surgery to be given at the Boston City Hospital, Boston, Mass. on October 27, 28, 29, 1949.

The course will cover various phases of gastrointestinal surgery. It will be under the personal direction of Dr. Owen H. Wangensteen, Professor of Surgery, University of Minnesota Medical School, assisted by Lord Alfred Webb-Johnson, President of the Royal College of Surgeons, London, England, and the members of the surgical staff of the Boston City Hospital, as well as other distinguished guests.

Enrollment in the course is limited to 250. The fee will be $35.00 per person. Veterans may take this course under the G. I. Bill of Rights.

For further information and enrollment write to the National Gastroenterological Association, Dept. GSJ, 1819 Broadway, New York 23, N. Y.

CORRESPONDENCE

March 21, 1949.

Dr. George F. Lull, Secretary and General Manager,
American Medical Association.

Dear Doctor Lull:

In response to your communication of March 15th addressed to Dr. Harry L. Arnold, Jr., Secretary, Hawaii Territorial Medical Association, which I have been asked to reply to—the Blood Bank of Hawaii is the only Blood Bank in the Territory, having started sometime before the war under my position as President and Director.

The Board of Trustees or Directors sets the policies of the bank and has over-all control of its policies.

At the present time the Blood Bank of Hawaii serves all the hospitals in the Territory in the sense that we are on call to serve them all at a moment's notice. Regularly it serves the patients in twenty-eight hospitals in the Territory, which number includes all the hospitals on this Island (Oahu) ten on the Island of Hawaii, the Kalaupapa Leper Settlement on Molokai and Kula Sanitarium on Maui.

From the bank in Honolulu the donor teams are sent out to various population centers on this Island as well as the other Islands to take donors. The team goes at regular intervals to some places and at irregular intervals to others. The bloods are brought by air to Honolulu for processing. Because of our splendid and frequent air service schedules we are able to transport blood to any outlying hospitals almost at once, and to take up the slack and to be ready for instant transfusion purposes, we maintain at each of twenty-eight hospitals selections of blood of the various types and in such numbers as to meet any emergency demand. These bloods are kept as "stock" in the laboratory ice boxes of these various hospitals, and no matter what time of day or night an emergency occurs each of these hospitals has instantly available a supply of blood of all types, both Rh-negative and Rh-positive, as well as Low-titered O so that there is no time lapse in the event that an emergency arises.

By wire, code or telephone, these outlying hospitals report their needs daily to the central bank in Honolulu and the blood is shipped out in special, tested containers, each container holding six doses of blood. The blood is packed with dry ice so that it reaches its destination in perfect condition and thus far, in our several years of operation, we have had no difficulty whatever with supplying all of the Territory's blood needs from one central station. (We have even shipped blood packed in dry ice to New York City and it has been used on patients without reaction.)

Our bank uses the standard sterile transfusovacs (put out by both Baxter and Cutter) containing "ACD" solution and our blood can therefore be used within thirty days, altho 80% of it is used within two weeks of being drawn. Any hospital having outdated blood on hand returns it to us for credit and such blood is processed into plasma. If any hospital fails to return blood when outdated, we make them financially responsible. Both our liquid and dried plasma is also kept in stock at all distribution centers and hospitals.

I have set forth this rather detailed explanation of our operations so that you may know that we have perfected an organization plan which has the full and enthusiastic cooperation from everyone concerned, and by the use of the insurance system and the replacement system, as well as the organization reserves, we are able to keep approximately 600 doses of blood on hand at all times. This number includes those at our central bank and at all the hospitals.

At the present time we are turning out approximately one thousand doses of blood per month and we are capable of turning out five thousand doses of blood at any time with our equipment, facilities and personnel, both active and on call. Our Board of Trustees has recently authorized the extension of our central bank in Honolulu by about one-third, and we are now in the process of rebuilding our present quarters for this enlargement.

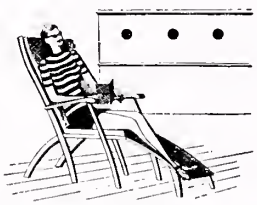
F. J. PINKERTON, M.D.,
Director,
Blood Bank of Hawaii.

How to S-T-R-E-T-C-H your travel dollars



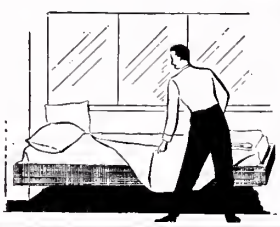
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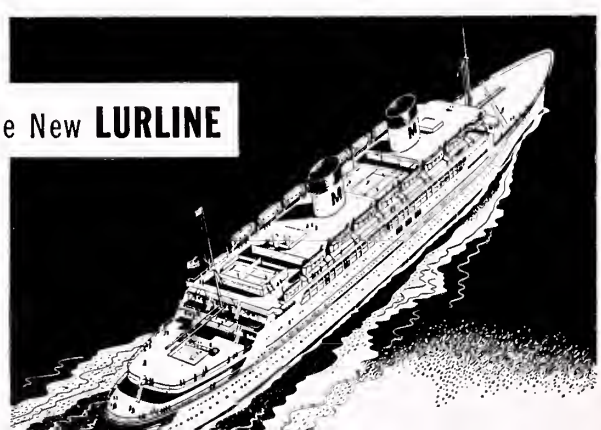
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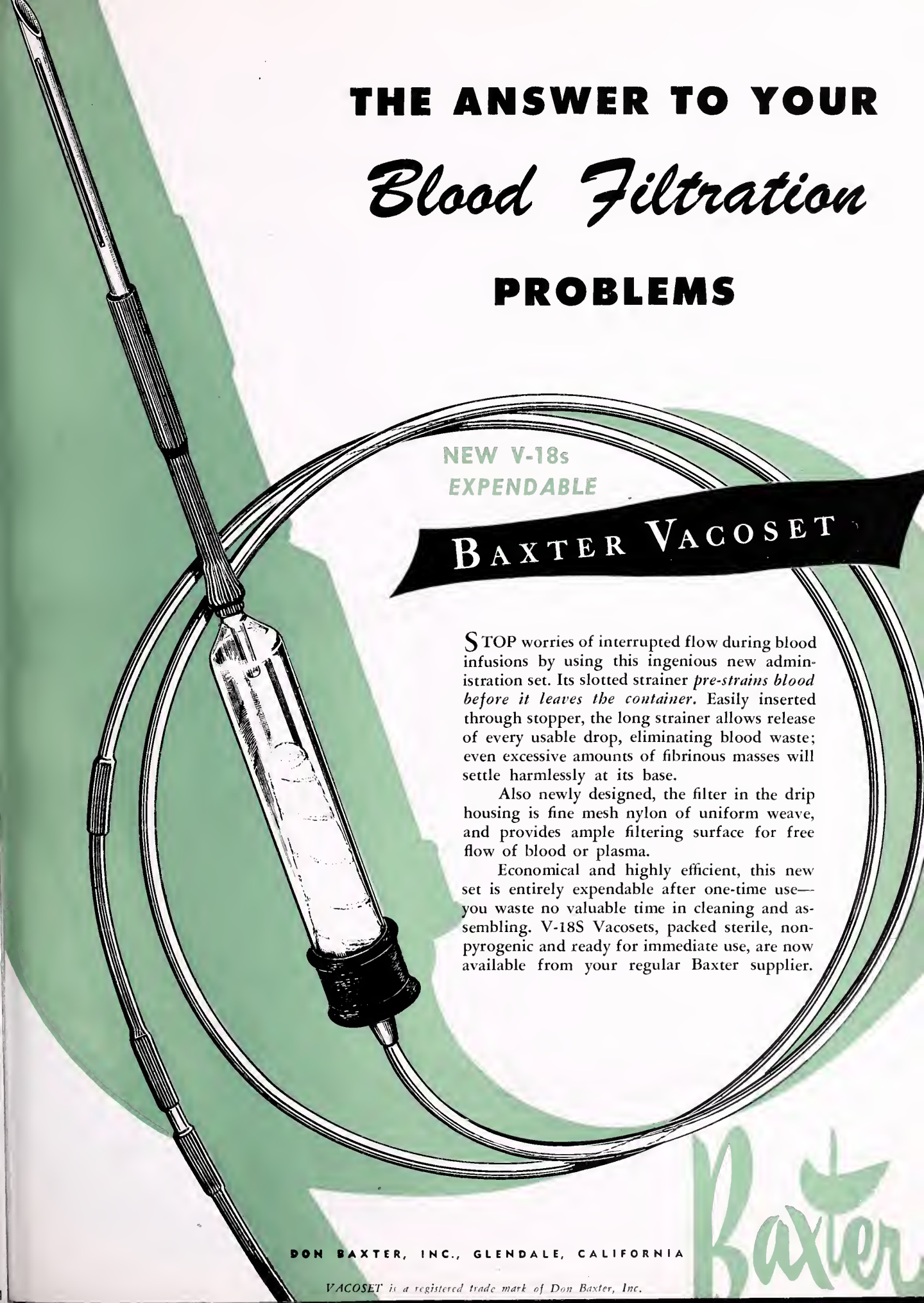
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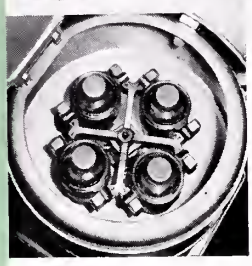
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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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HOME NURSING PROGRAM of the HAWAII CANCER SOCIETY

ESTHER M. STUBBLEFIELD, P.H.N.*

The Home Nursing Education and Welfare Service was begun on Oahu by the Hawaii Cancer Society February 1, 1949. The program, patterned after similar programs on the mainland, aims at teaching a relative or friend how to care for the cancer patient and to keep him comfortable. Procedures taught have included bed making, with emphasis on protection of the mattress and comfort of the patient; bed bath; care of the patient's skin for prevention of bed sores; and other care as indicated. Care of colostomy cases has been undertaken with special attention to teaching the patient to care for himself. The private physician is kept informed as to the patient's condition.

The most satisfactory service has been given in situations where the nurse has been able to contact the patient in the hospital prior to his discharge. The nurse works closely with the physician in learning what information he has given the patient concerning his diagnosis and general condition. This includes the emotional as well as the physical aspects of cancer.

In the colostomy cases, most of the patients are enjoying good health, relatively free of any pain or discomfort and have made remarkable adjustments to "living with" their colostomy.

Besides the actual nursing techniques taught, the patients express a great need to talk to someone outside the family circle about their cancer, the emotional factors involved and their general physical limitations and abilities. The numerous questions asked range from "what my friend said" to "why did the doctor do that?" Patients often have many questions they would like to talk over with some professional person, but hesitate to take their physician's time.

Plans have been made for the establishment of a loan closet, to be expanded as the need arises. At present the rental service of Queen's Hospital is utilized for use of equipment required in the home care of cancer patients. The Hawaii Cancer Society will also be able, through the use of volunteer help, to provide dressings for those patients unable to provide them for themselves.

A number of the community's health organizations, including the Occupational Therapy Association, Queen's Community Health Service, St. Francis' Out-Patient Department, the Practical Nurse School, Child and Family Service, Department of Public Welfare and others, have indicated a willingness to cooperate either in a direct service program or in a consultative capacity to the personnel of the Hawaii Cancer Society in further developing this program.

Plans for developing volunteer services have been discussed with representatives of the Junior League and various racial groups in the community and individuals interested in participating in such a program. Volunteer services might include providing transportation to and from clinics or doctors' offices, making dressings, visiting patients who are bedfast, and possibly shopping for those who find it difficult to get their personal needs attended to.

The Hawaii Cancer Society's Home Nursing Education and Welfare Service has, on the whole, developed slowly but with a very definite promise for the future. The first few months of the program's existence have shown the case-load carried by the nurse in charge grow from zero to a number substantial enough to keep the staff constantly occupied in striving to translate all of the patients' needs and desires into reality.

The number of patients enrolled in the program varies from week to week and sometimes from day to day; but the increasing recognition and acceptance of the service by the physicians of Oahu, as it proves itself of definite value, augurs well for its future expansion.

Extent of the program is theoretically limited only by the number of cancer patients. The only available estimate now at hand—and that a very loose one—indicates there are probably in the neighborhood of 600 cancer patients now on Oahu. A recent study made by the Cancer Control Section of the Department of Health

* Director, Home Nursing Education and Welfare Service, Hawaii Cancer Society.

showed that only 70 per cent of the cancer patients on the island terminated in a hospital. In other words, 30 per cent of the cancer patients terminated at home and undoubtedly a much larger percentage went to a hospital only during the final week or two before termination.

With these figures—even though the primary estimate is very largely open to question—the need for the Home Nursing Education and Welfare Service is satisfactorily demonstrated. When an additional factor is taken into consideration, that the incidence of cancer is increasing, year after year, as our population ages, the need for such service to be established now, in a sufficiently flexible form so that it can expand to keep pace with a steadily increasing case-load as it develops, is readily apparent.

INSTITUTE FOR NURSES

Sponsored by the Board of Licensing for Nurses, Territory of Hawaii, Miss Mary J. Dunn, Senior Nurse Officer, United States Public Health Service, conducted an institute at the Mabel Smyth Building, February 21 to 25, 1949. A second week was devoted to follow-up of the work in training schools and nursing service agencies.

The institute, attended by 74 nurse supervisors, teachers and administrators, considered comprehensive nursing and its implications. Social and economic changes have affected our concepts of nursing and this must be taken into account in planning future nursing education. Emphasis must be placed on human behavior rather than subject matter with a positive approach to health through a good student health program; preparation for citizenship; mental as well as physical health; and preventive as well as curative nursing.

Miss Dunn pointed out ways of enriching nursing service and nursing education. Included among these were suggestions that:

1. All instructors have a 3 to 5 day observation period with the Health Department.
2. Health Department facilities be more thoroughly utilized.
3. The public health nursing curriculum guide be used more extensively in planning the curriculum for schools of nursing.
4. An in-service program to integrate social and health aspects of nursing be set up for staff nurses.
5. The public health aspects of each course be set up and worked out with a consultant nurse in planning the curriculum.
6. The services of a public health nurse coordinator be utilized.
7. More extensive home visiting by students (public health nursing affiliation) be considered.
8. A complete survey of all possible community facilities available be carried out to determine how they can be used in nursing.
9. A referral system be used whereby there will be more interchange among public health departments, schools of nursing and hospitals.
10. There be an exchange system of faculty members among various institutions in the community.
11. Better use of day care centers, nursery schools, social and health agencies be made, with a means of approach and evaluation of them.
12. Pediatric nursing in schools of nursing be enriched through affiliations.
13. Obstetric nursing in schools of nursing be enriched through clinic management, materials on child health conferences and aids from children's bureaus.
14. There be better use of outpatient departments for clinical material.
15. A new approach to nursing case studies be used with more emphasis on the background of the patient, and post-hospitalization plans.
16. There be maximum utilization of every opportunity to consider the patient as a person.
17. A curriculum be worked toward which is a completely integrated four year program under a college or university to have education as the major objective rather than needed nursing service for the hospital.

ANNE M. FISHER, *President*
Hawaii League of Nursing Education

BETWEEN THE LINES OF THE BROWN REPORT

MARY J. DUNN*

A word of commendation is due you on what you have done to date through your League of Nursing Education in studying the Brown Report. In reviewing the reports of the various groups, one finds some very pertinent and thought provoking questions raised. Am I correct in assuming that you will not rest comfortably until each of these questions is answered to your satisfaction?

In considering certain aspects or implications of the Brown Report we should keep before us continuously: Who instigated it and why it was instigated. It was instigated *by* the National Nursing Council—the coordinating agency for the fourteen national organizations concerned with nursing. It was instigated *because* the Council was convinced that inadequacies in both the quantity and quality of nursing service stemmed primarily from an outmoded system of nursing education which was no longer capable of attracting the number of students needed, or of giving the varied preparation requisite for nursing today.

The kind of nursing we are expected to render today has begun to swing further in the direction of health, with emphasis upon the so-called "normal" person, and sickness as a deviation from normal. There is implied increased understanding of the emotional factors which are a component—if not the cause—of disease. Thus, the public is coming to expect and demand that we of the health professions be able to aid presons and

* Senior Nurse Officer, United States Public Health Service

families to maintain positive health. This responsibility which we are being given is the challenge and the new source of motivation for the years ahead.

Thus, these ever increasing demands and expectations of the public—the constituents of nursing—make it impossible for us to consider curative nursing as an entity; or the patient as an entity; or of hospitalization as an entity in the life experience of any patient.

Those of us who participated in the Institute during the past week are in agreement, I am confident, that the statement just made is merely a reiteration of the central theme of our Institute: "What Are the Implications of Comprehensive Nursing?" or "Why Should We and How May We Implement the Social and Health Concepts in the Basic Nursing Curriculum?"

The development of a new pattern of nursing service and of nursing education implies the necessity of our attaining and maintaining full professional status. You will recall that the Brown Report enumerates certain criteria formulated a generation ago by Dr. Abraham Flexner for judging whether or not an occupation has attained professional status. According to his interpretation of the professions

1. They involve essentially intellectual operations accompanied by large individual responsibility;
2. They are learned in nature and their members are constantly resorting to the laboratory and seminar for a fresh supply of facts;
3. They are not merely academic and theoretical, however, but are definitely practical in their aims;
4. They possess a technique capable of communication through a highly specialized educational discipline;
5. They are self-organized with activities, duties and responsibilities which completely engage their participants and develop group consciousness;
6. They are more likely to be responsive to public interest than are unorganized and isolated individuals, and they tend to become increasingly concerned with the achievement of social ends.

Nursing has moved forward in the direction of meeting these ends, so that we may be considered an evolving profession. However, only a very small fraction of the some 1250 state accredited schools of nursing and their graduates have as yet met the tests of professionalism, all of which has greatly lowered the prestige of nursing. Furthermore, the public is provided with no greater assurance of competence than the often all too meager qualifications required by boards of nurse examiners.

It has been pointed out that "a profession is as good or as bad as the educational base on which it rests." In order to make a real profession of nursing the apprenticeship system must give way. It is the hope when it does, that the hospitals will continue to recognize their responsibility toward the education of the student nurse by making their wards available for clinical instruction. At the beginning of 1948, just under 10,000 students were enrolled in collegiate schools out of a total of 92,000 in all schools of nursing. However, almost half of the students in the collegiate schools were pursuing the regular 3 year nursing program, leading to a diploma only, since 29 of the 77 schools were offering both programs and 8 offered a diploma program only.

Are we ready or how must we "get in readiness" to take aggressive action? And here, perhaps, is where we really need to "read between the lines" of the Brown Report. I am going to share with you some of our assets and weaknesses of the professional sector of nursing, as viewed by Dr. Brown, which she pointed out to a group of nurses at a conference in Boston a few months ago.

Assets: Good social motivation; flexibility; intellectual humility; realism in planning—education programs and service programs; development in interpersonal relationships.

Weaknesses: Self-evasiveness; lack of knowledge of what the social sciences can contribute to the understanding of the patient, family and community; personality growth and development; lack of knowledge of how scientific methods may be utilized in analyzing facts; failure to use social science in understanding attitudes; lack of assurance and inability to interpret nursing to the community.

If these do represent some of our characteristic strengths and weaknesses, it would seem well for us to capitalize upon them in charting our future course. Our weaknesses usually result from too little aggression in relation to our strong points.

What is being done at national level to implement the Brown Report? Some time ago a committee was appointed to effect the major recommendations. This was an important step toward aggressive action if we are to achieve our purposes. The chairman is Mary Connor and the full-time secretary, Helen Goodale. Among other activities this committee is preparing study guides to be distributed widely over the country as an aid in studying the Brown Report. The first of the series is now in circulation. These guides will follow a definite pattern. Each will include three parts:

1. Steps in acquainting the profession with Nursing for the Future.
2. Steps in acquainting the public with Nursing for the Future.
3. Progressive reports of committees on implementing the Brown Report.

Another service of this committee is that of consultation service on request, assistance with institutes, etc. A substantial budget has been prepared which, if granted, will provide for the carrying out of very extensive plans for this committee. Still another activity of this committee is the work of a "subcommittee on School Data Analysis" with Miss Louise Knapp, chairman. The subcommittee is now distributing to all state accredited schools of nursing a survey form with the hope that these completed data will accomplish the following:

1. Facilitate planning of nursing education on a regional and national basis.
2. Furnish information to community and state planning programs.
3. Indicate present needs in nursing education.
4. Identify basic degree and diploma programs from which lists of schools with certain characteristics could be prepared.
5. Assist in recruitment.
6. Demostrate what additional funds are necessary for nursing education.
7. Give an analysis of the nation's nursing education facilities upon which to build nursing for the future.

These few evidences of actions should serve to assure us that at the national level we are not remaining still but that we are moving forward quite rapidly in nursing developments.

And now for a very important consideration. What is being done? What should be done at the local level and more specifically, here in the Territory of Hawaii?

1. Continue to study, discuss and interpret the various chapters of the Brown Report and with the realization that we must move on to an affirmative plateau and remain there.
2. Share the report with and assist in its interpretation in relation to all appropriate individuals and groups. Specifically, hospital administrators, medical profession; citizens of the community—the constituents of nursing; the legislative groups—as consumers and as those to interest in appropriating funds.
3. Keep informed of the work of the Committee on Information; and of such other committees as the one for Unification of Nursing Accreditation.

Finally, let us be reminded continuously as to why our concerted effort: To change and improve the out-moded patterns of nursing service and of nursing education so that as quickly as possible we shall have prepared the members of the health team discussed in the Brown Report, namely, the professional nurse, the bedside graduate nurse and the practical nurse.

As far as your responsibility here in the Territory of Hawaii—as I see it—goes, it calls for

1. Expansion of opportunities of preparing adequately the practical nurse (of whom we should ultimately have 1 to 1 or 2 to 1 in relation to the professional nurse).
2. It calls for improving in every way possible the two accredited schools of nursing here. Such improvement must be in terms of what is best for the student, and not in terms of needed service to the hospital.
3. It calls for the directing of every effort toward the establishment of a University School of Nursing (a basic collegiate program). Such a school of nursing should be an autonomous unit of the University with its own Dean, nurse faculty and a substantial operating budget. It should provide under its control a well integrated curriculum (preferably 4 years in length) that should prepare the professional nurse who, at the completion of her program, will have merited a baccalaureate degree with a major in nursing, and will be qualified to function as a professional nurse in the community in all so-called first level nursing positions including: general duty or assistant head nursing in the hospital; private practice—hospital and home; and staff nursing in public health under PHN supervision.

May I urge you to be satisfied with no plan less good! You are blessed with rich potentialities and facilities which, in turn, increase your responsibility to move forward, and to move forward quickly. I am confident that you can develop here programs that will be unexcelled. So with an affirmative attitude, a willingness to try new ways and a determination that it can be done the Territory of Hawaii can and should make a unique contribution to the new nursing of tomorrow. Or in the words of Whitehead—ours is "to maintain stability but never to lose the spark of change."

LEAGUE OF NURSING EDUCATION MEMBERSHIP ANALYZED

To All Co-workers:

The question is asked, "What benefit would I gain from joining the League of Nursing Education?" The aims of this organization are:

1. To consider all questions relating to nursing education, both under-graduate and post-graduate.
2. To assist in bringing about better standards of nursing service in hospitals.
3. To bring about a greater interest in matters pertaining to public health and welfare and to assist in furthering these functions by cooperating with educational, philanthropic and social groups.
4. To cooperate closely with the National League of Nursing Education in the development and maintenance of the highest ideals in nursing service and nursing education.
5. To develop a sense of responsibility and interest regarding nursing matters among graduate professional nurses who are doing any form of educational work.

In considering the objectives emphasized by Miss Dunn as the goal to be worked toward to improve nursing service and nursing education, we are well aware of our responsibilities and the unlimited opportunity to work together as an educational group for the benefit of our community.

Won't you join us?

ANNE M. FISHER, *President*
Hawaii League of Nursing Education

ANNUAL CONVENTION DATES SET

Program Chairman Alison McBride has announced September 13-14-15 as the dates for the 18th Annual Convention of the Territorial Nurses' Association which will be held in the Mabel Smyth Building.

A discussion of the nursing needs of the Territory may be the program for an evening meeting September 13, to which the public will be invited.

Miss Pearl Shalit, Nurse Consultant, United States Public Health Service Division of Mental Hygiene, will keynote the convention theme, *A new Perspective for Nursing*. Three discussion groups led by experts in the mental hygiene field will consider the understanding of the sick patient, the employed worker and the school child.

"Proposed Federal Health and Education Legislation"; a League program and a progress report from the Committee to Implement the Brown Report; field trips to Territorial institutions; and luncheon program meetings September 14 and 15 are the substance of the Program Committee's plans so far.

Nurses are urged to familiarize themselves with "Nursing for the Future" by Dr. Lucille Brown, (Russel Sage Foundation, N.Y.C., price $2) as background for the convention.

NURSES' SECTION OF THE HONOLULU MEDICAL LIBRARY

For the benefit of nurses who do not realize they are co-owners of a good reference library associated with the Medical Library in Mabel Smyth Building, it is suggested that a visit to the Library would be well worthwhile. Mrs. Hill, Librarian, and her assistant Miss Newhall, will be pleased to show you around, answer your questions, and assist in finding the books you want.

Because of the classification system used, it is not possible to have all the books belonging to the Nurses Association together in just one place, but they are all readily accessible. In addition, all other material in the library is available to nurses for reference. Plan to visit the Library on your next trip to Mabel Smyth Building.

Announcements of new nurses' books received in the Library and book reviews are to be found in a special section of the HAWAII MEDICAL JOURNAL. Just consult the index.

NURSES ASKED TO STUDY NEW STRUCTURE PLANS

From the Committee on the Structure of National Nursing Organizations comes the request that nurses consider and decide between (1) a two-organization plan and (2) a revised one-organization plan for the structure of organized nursing just as soon as a study handbook can be made available.

The two-organization plan was recommended by the Boards of Directors of the National League of Nursing Education, the National Organization for Public Health Nursing, the National Association of Colored Graduate Nurses, the American Association of Industrial Nurses and the Association of Collegiate Schools of Nursing. The Board of Directors of the American Nurses Association favored the one-organization plan because ANA members have, at two House of Delegates meetings, indicated their interest in one organization. Both of the new plans are variations of the "Tentative Plan" published in the May, 1948 *American Journal of Nursing* and elsewhere.

The two-organization plan differs from last spring's "Tentative Plan" chiefly in that there would be two separate corporations:

1. An organization to which only nurses would belong would be incorporated as the American Nurses' Association, to:
   a. Include occupational sections, which would among other things serve as bases for proportional representation of different nurse groups in the governing bodies, and councils made up of clinical specialists. The 1948 Plan suggested that occupational and clinical specialty groupings of nurses all be called sections.
   b. Offer an Assembly to afford direct voice at biennial conventions to any member wishing to express an opinion.
2. The divisions proposed in the "Tentative Plan" would become a separate corporation, the Nursing League of America, with nurse, non-nurse, agency, and school membership.
3. To coordinate activities of mutual concern to the new ANA and the new League, a joint board is proposed, made up of representatives from the boards of the two organizations.
4. Part of the headquarters services would be under supervision of the professional organization; part under the joint board; part under the education and service organization.

The new one-organization plan would use the name American Nursing Association as did last spring's "Tentative Plan," but it would differ from it in that:

1. Membership in forums, which would be discussion bodies with only advisory powers in relation to the American Nursing Association, is offered to non-nurses and agencies instead of membership in the over-all association, as proposed in the 1948 plan.
2. The 1949 one-organization plan would give voting membership in the American Nursing Association only to nurses.
3. The same provisions for Assembly, sections, and councils as indicated for the American Nurses' Association in the two-organization plan would be made for the American Nursing Association in the one-organization plan.

Details of both plans will be presented in the handbook. For further information phone or write the Nurses' Association, Mabel Smyth Building, Honolulu.

NEWS NOTES

Honolulu

MISS HAZEL A. CHESBRO and MISS ELIZABETH ST. J. PATTERSON, both graduates from the Highland School of Nursing, New York, are presently enrolled in the two-month course in tuberculosis nursing at Leahi Hospital. This course of instruction has been approved by the Board for Licensing of Nurses, Territory of Hawaii and by the Veterans Administration for the training of veterans. It covers medical, surgical and nursing classes and numerous clinical observations and participation in related programs (case-finding; patient education; rehabilitation; diversional therapy; pathological laboratory; operating room; outpatient and social service). Field trips are also made to community agencies assisting with the total care of tuberculosis patients, their families and other contacts.

Plans have been completed for the monthly staff education program which began in March. In addition, Leahi still offers an extensive in-service staff education program for the orientation of every new staff member. Classes and demonstrations designed to provide basic

instruction in tuberculosis and on protective measures are held beginning from the first day of employment.

Nurses who have recently joined Leahi Hospital Staff include:

LAVERN CARMICHAEL, Mississippi Baptist Hospital, Mississippi.

HELEN EISSNER, Bellevue Hospital, New York.

MADELINE FERNANDEZ, Queen's Hospital, Honolulu.

MILDRED KINGERY, Los Angeles County General Hospital, California.

ROSA LOUBNON, St. Francis Training School, Kansas.

SHIRLEY MCCORMICK, State University of Iowa, Iowa.

MARILYN RITCHISON, State University of Iowa, Iowa.

LESLIE ZANE, St. Francis Hospital, Honolulu.

Kauai

MISS THELMA HENSLEY, Superintendent of Nurses, Mahelona Hospital, will be on the mainland for three months beginning with April. She plans to study as well as travel.

MISS JANICE JITSUKO ARASHIRO and MISS PAULA NAKAMURA, both graduates of St. Francis Hospital School of Nursing, Honolulu, joined the nursing staff of Mahelona Hospital in February.

MARY J. THOMAS of Wilcox Memorial Hospital has been appointed chairman of the Kauai Nurses' Association Bulletin Committee. HELEN GAGE and KIMIE TAMASHIRO will also serve on the committee.

Maui

TOSHIE HAMASHIGE, Queen's Hospital graduate, and RUTH NAKASONE, St. Luke's Hospital graduate, recently joined the staff of Pioneer Hospital, Lahaina.

MRS. AGNES GAY, Pioneer Hospital staff, became the mother of a baby girl born March 6, 1949.

MISS MARJORIE FUJIMOTO of Paia Hospital was recently married to Mr. Yasuyo Okinaka.

MISS PATRICIA KELLAS, a graduate of Providence Hospital in Oakland, California, is now a member of the Paia Hospital staff.

MRS. M. C. SCHMIDLING, who has been attending school in Peoria, Illinois, has returned to the staff of Malulani Hospital.

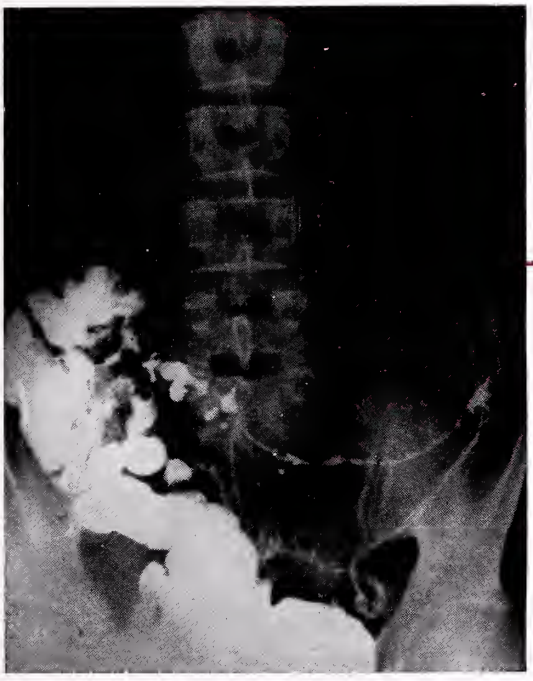
MRS. TRINADAD BALDAG is on sick leave and has been in Malulani Hospital for major surgery.

MISS MICHIE KOMO, a member of the Board of Health staff, is now Mrs. Kamitaki.

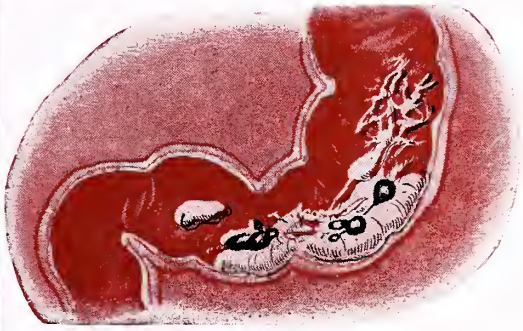
TREATMENT OF CONSTIPATION IN mucous colitis

"The treatment of the constipation in mucous colic does not differ from the treatment of uncomplicated constipation. It is, as always, of great importance to avoid irritating aperients, ... The stools should be rendered soft and more bulky and therefore more easy to expel with . . . and unirritating vegetable mucilages."

—Hurst, A., in Portis, S. A.: Diseases of the Digestive System, ed. 2, Philadelphia, Lea & Febiger, 1944, p. 692.



MUCOUS COLITIS. In this x-roy is shown the distinctive string-like appeoronce of the descending portion of the lower bowel in mucous colitis, o condition frequently occomponying severe degrees of spostic or otonic colon. In the sogittol section is shown the over-secretion of mucus odhering to the bowel woll.



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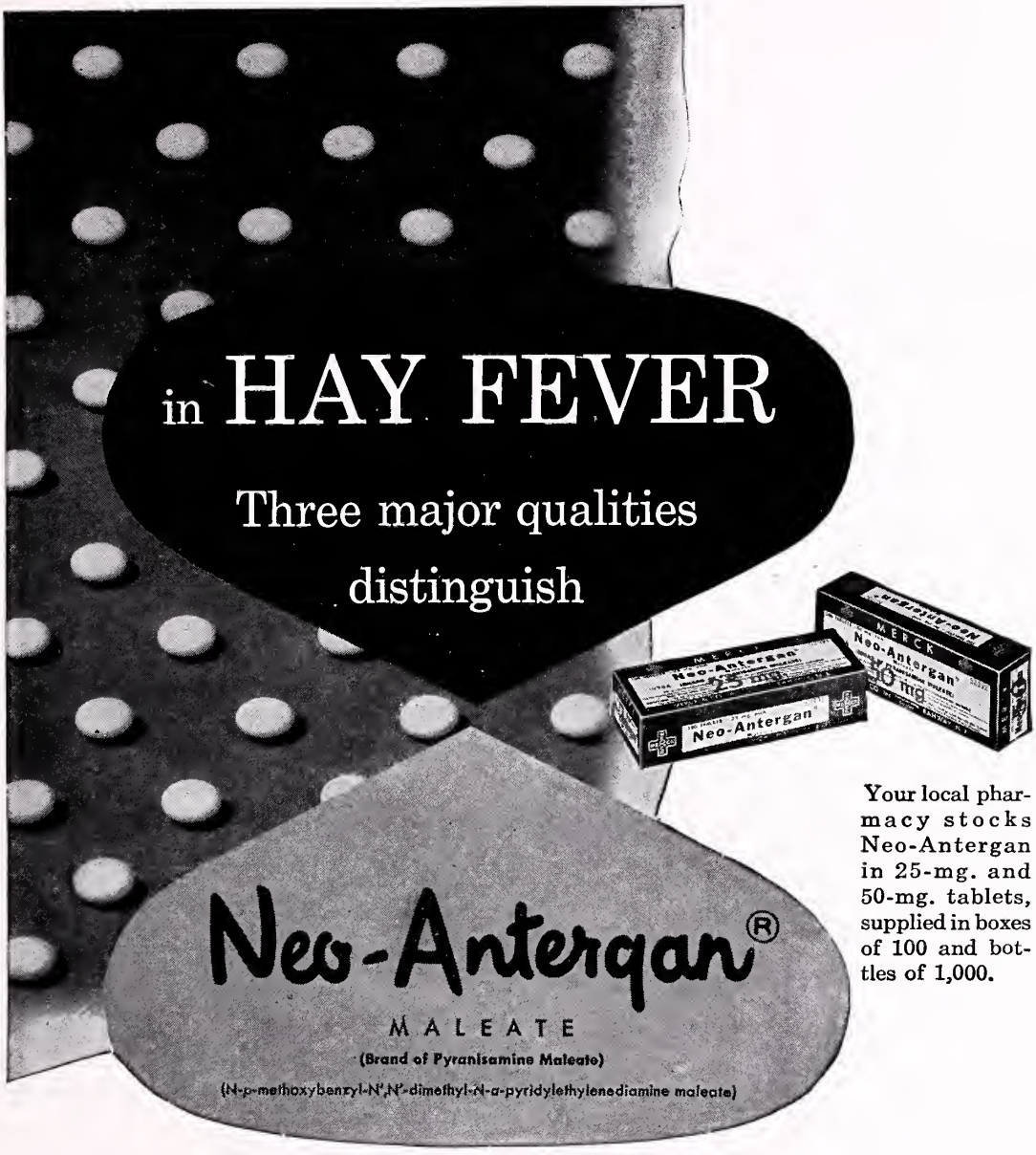
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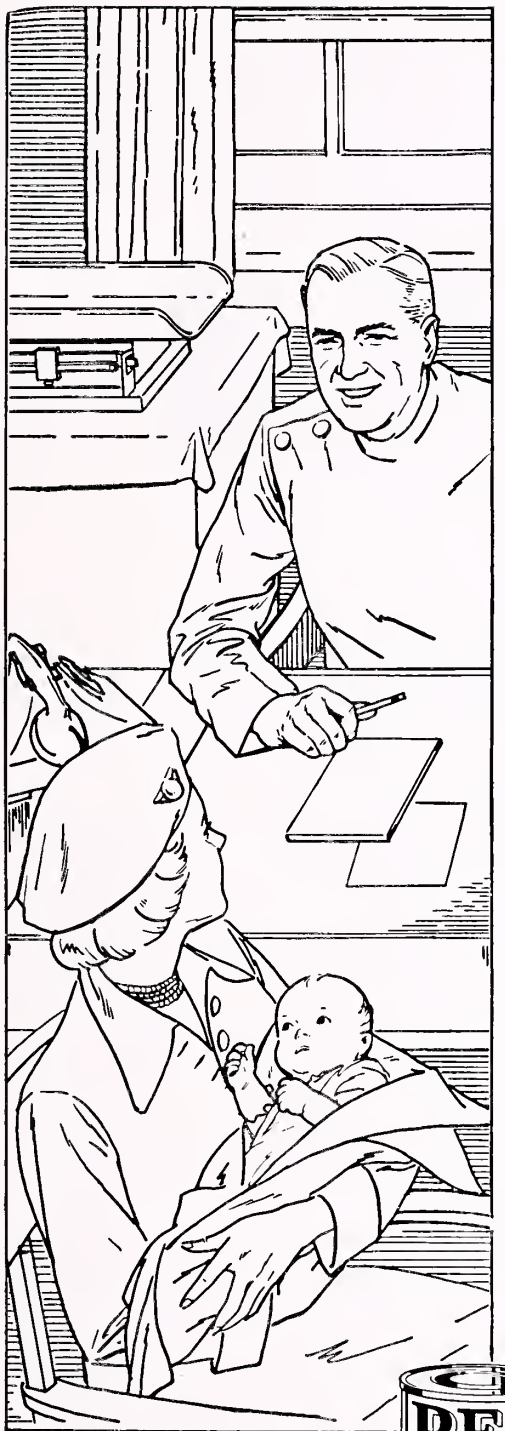
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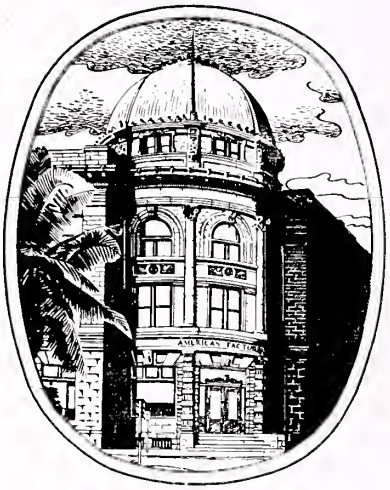
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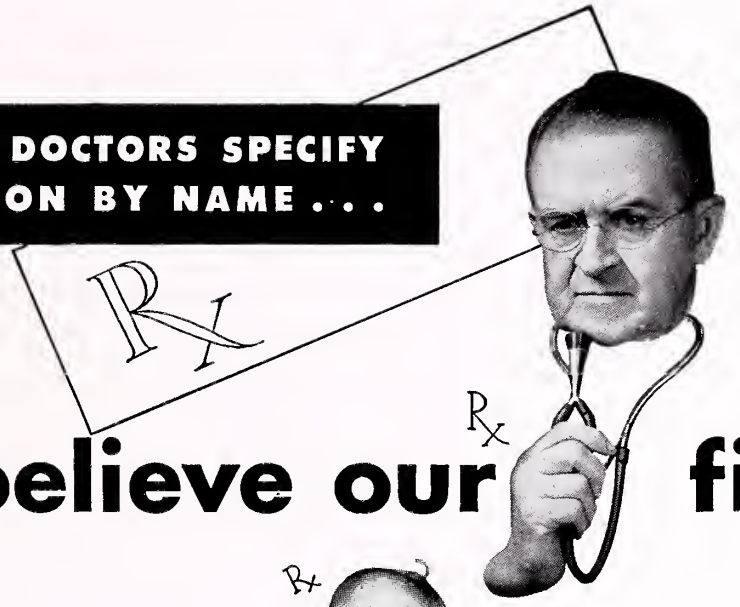
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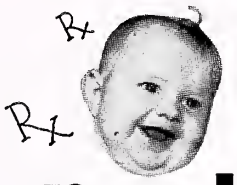
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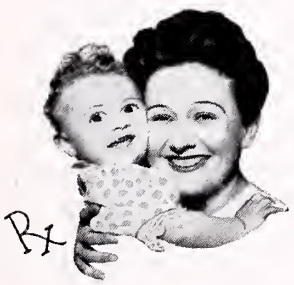
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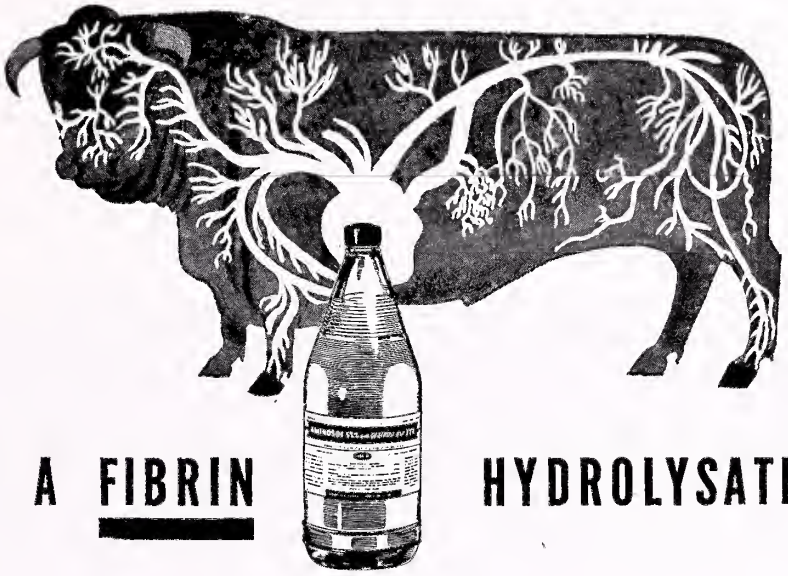
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1. Christensen, H. N., Lynch, E. L., Decker, D. G., and Powers, J. H. (1947), The Conjugated, Non-Protein Amino Acids of Plasma. IV. A Difference in the Utilization of the Peptides of Hydrolysates of Fibrin and Casein, J. Clin. Invest., 26:849, September.

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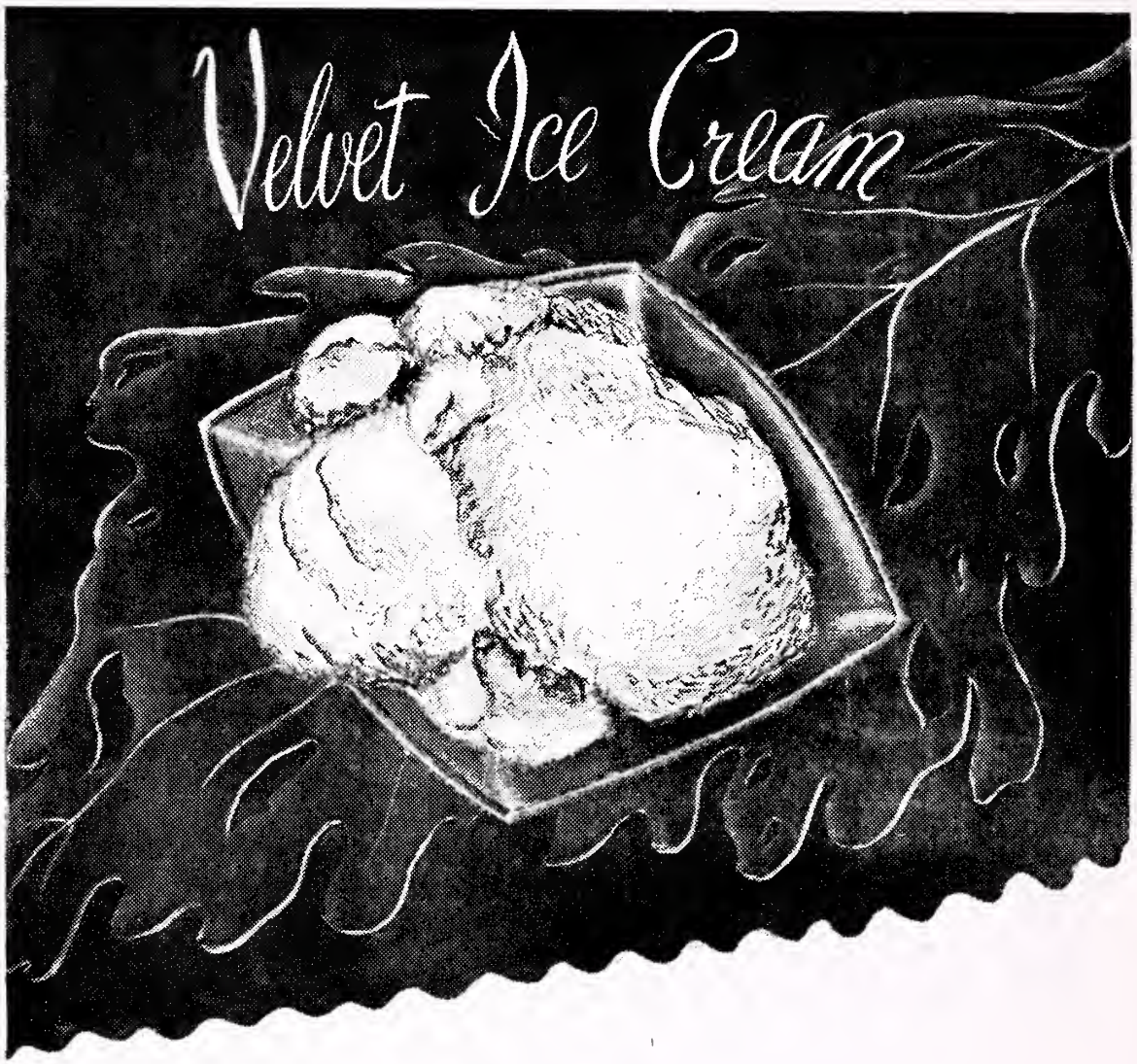
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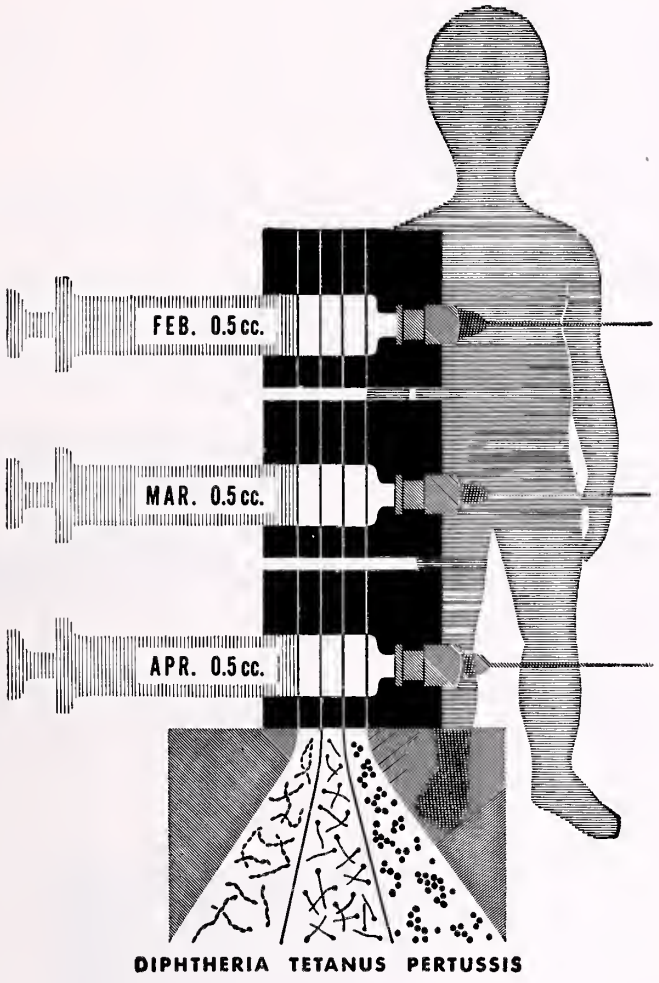
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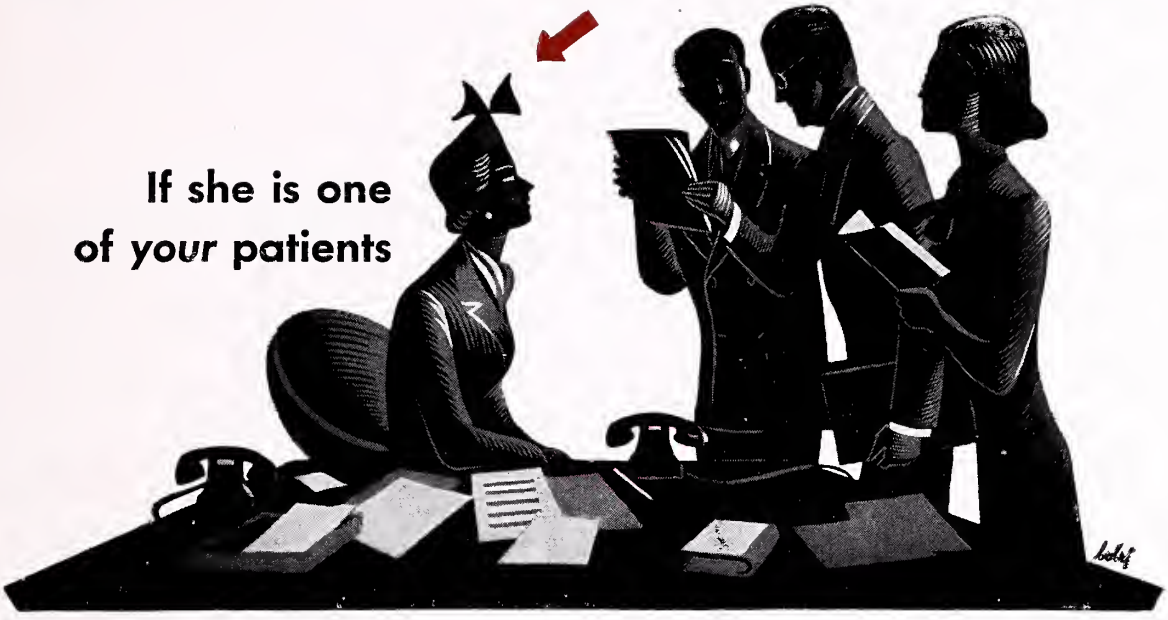
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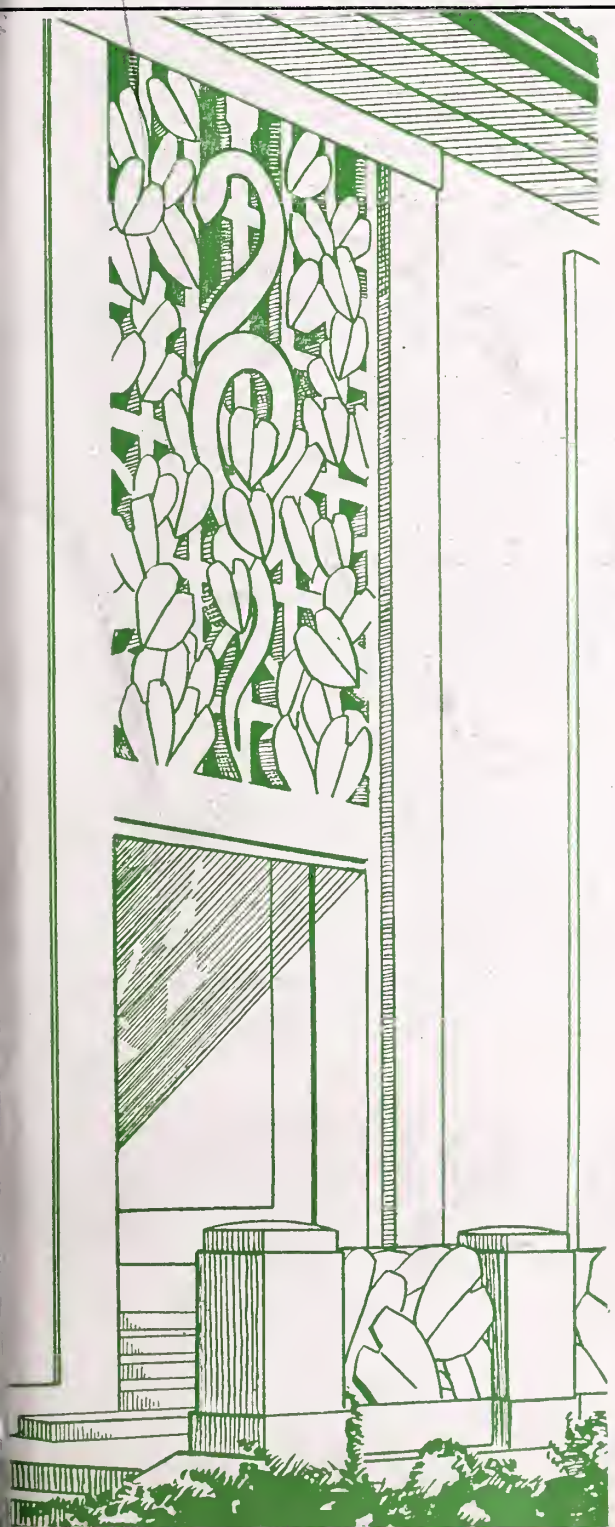
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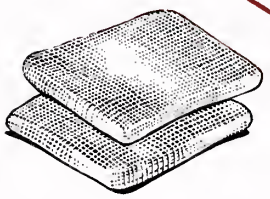
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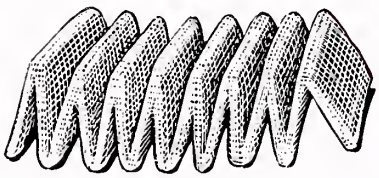
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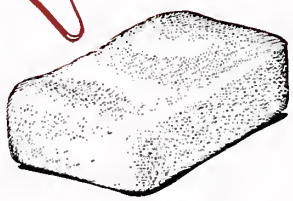
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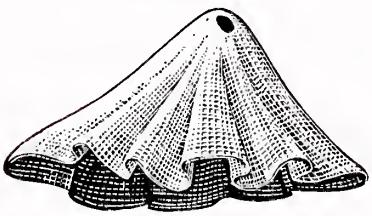
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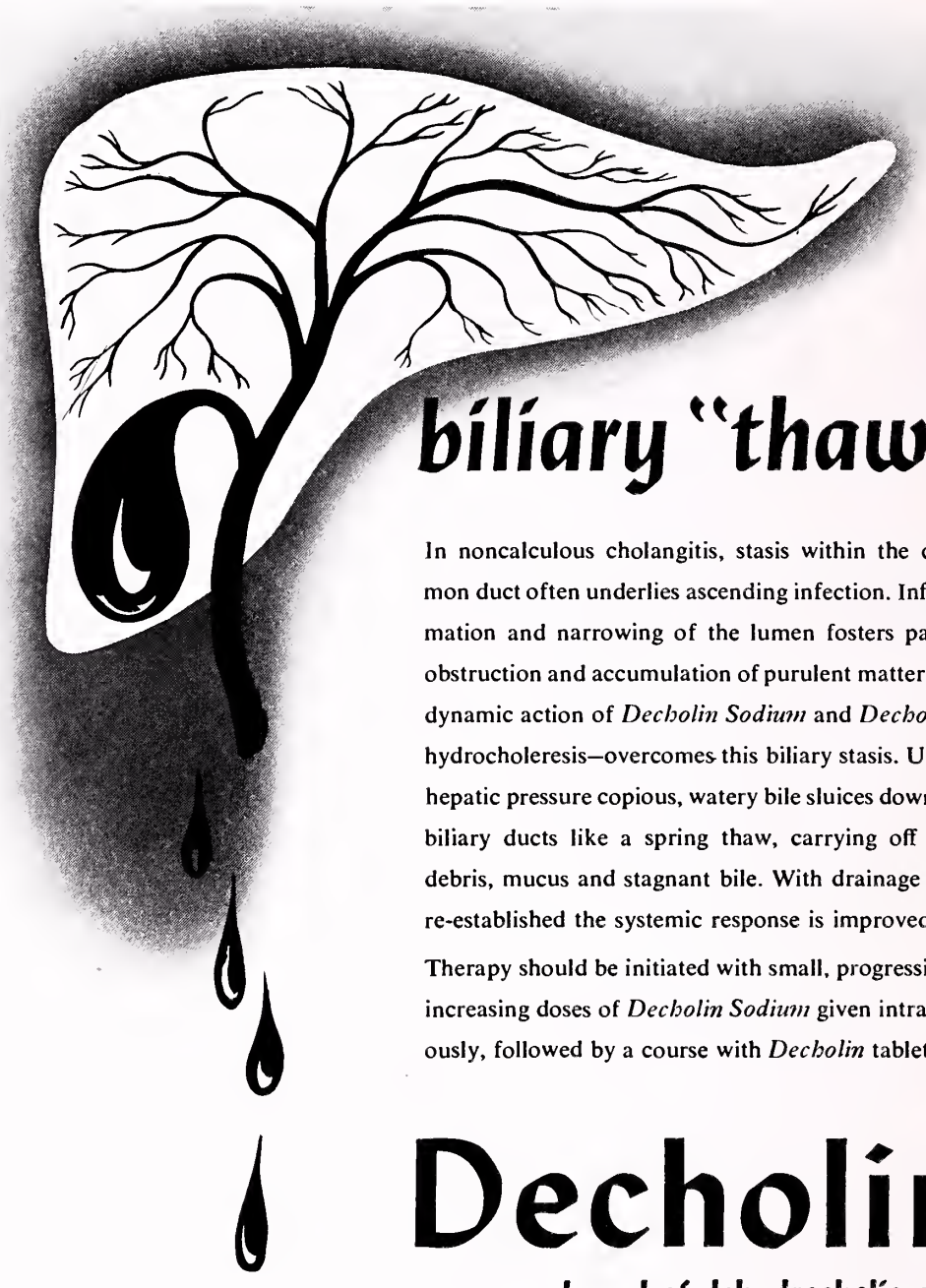
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1. Rawls, W. B.: New York Med. (no. 15) 3:19, 1947.

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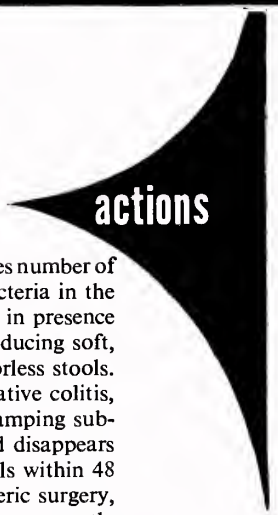
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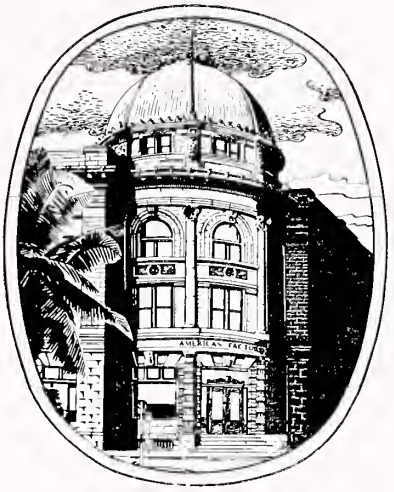


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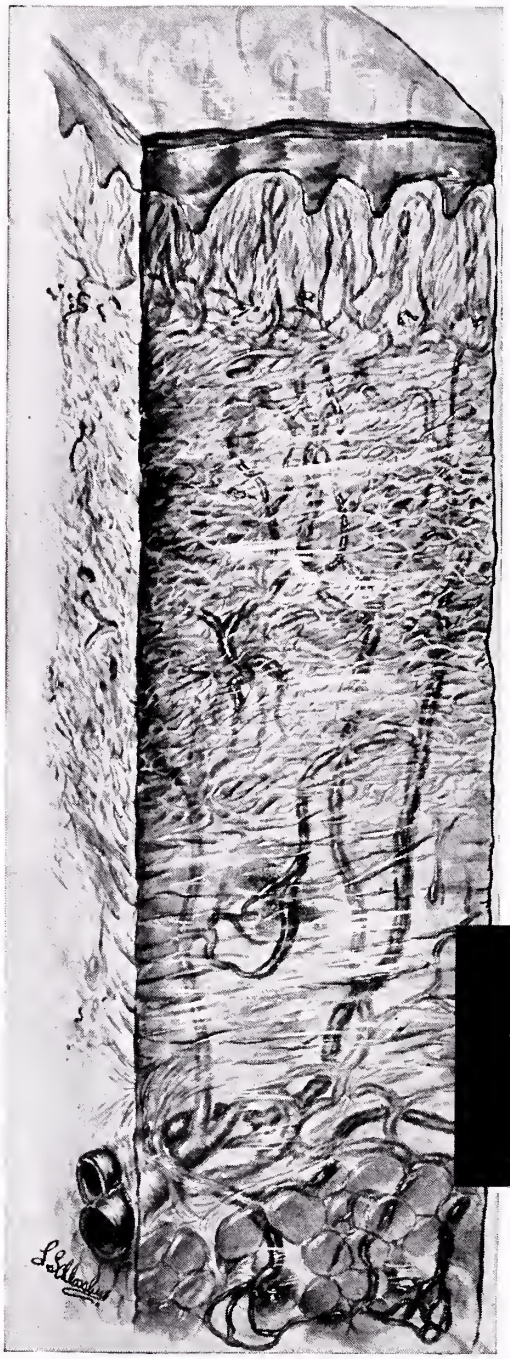
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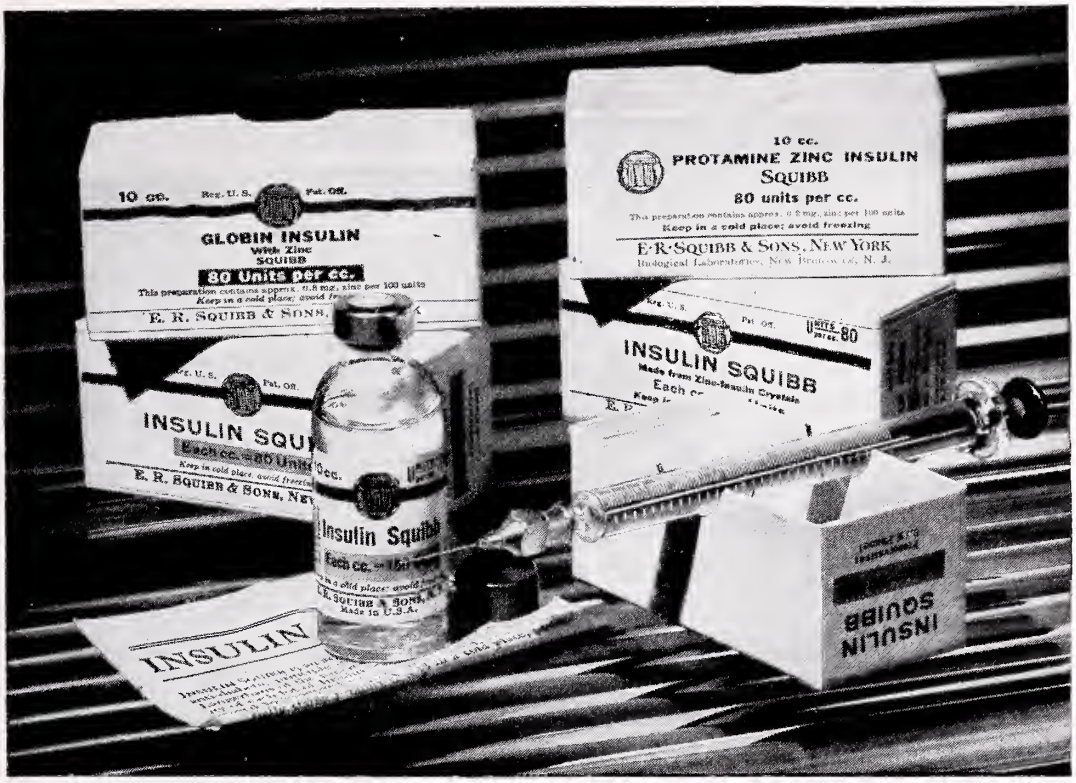
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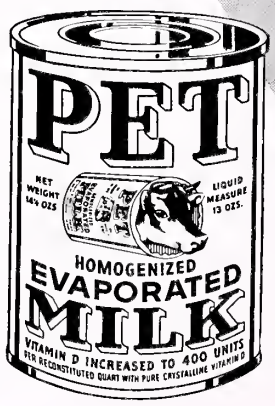
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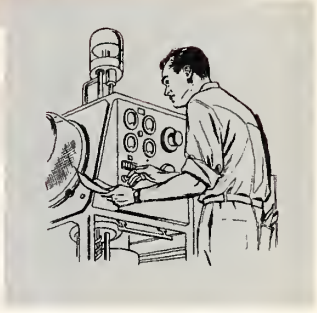
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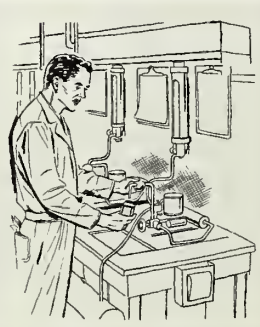
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The Use of Dermal Grafts for Tuberculous Stenosis of the Trachea and Bronchi

PAUL W. GEBAUER, M.D.
HONOLULU

FIBROUS strictures of the trachea and bronchi are frequent consequences of tuberculosis of these structures. If a stenosis or stricture is present long enough, or is severe enough, destruction of the lung distal to the deformity eventually occurs. In such instances surgical removal of the stenotic bronchus and its component lung may be clearly indicated. On the other hand, the process of lung destruction is usually gradual and prolonged, so that one frequently encounters healed stenosis of a main bronchus with the distal lung in a fairly well healed state, or with its disease limited to one lobe, whereas the remaining lobes, though free of active disease, are destined to succumb to the main bronchial stenosis through which they must function. When such a stenosis is responsible for distressing symptoms, periodic or persistent, it is accepted practice to excise the involved bronchus and the distal lung, whether the latter is destroyed or not. Such treatment affords symptomatic relief; however, it may sacrifice considerable volumes of good lung tissue, and therefore would be abandoned if a method to relieve the bronchostenosis were available.

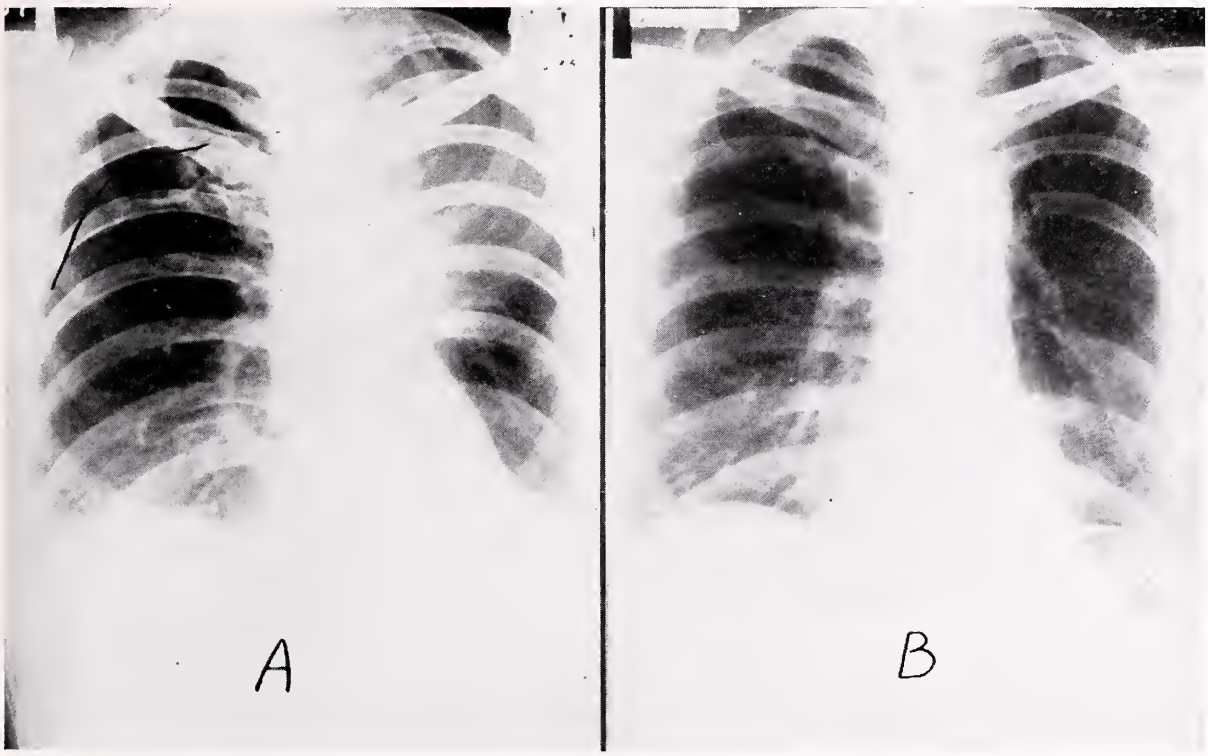


FIG. 1—Chest x-ray: A—shows right pneumothorax, and evidence of atelectasis of left upper lobe which occurred rather suddenly. Sputum positive. Bronchoscopy revealed severe stenosis of left main bronchus (Fig. 2, A). B—taken five months after left upper lobectomy and dermal graft of left main bronchus. Sputum negative. Right pneumothorax was not abandoned until two months after operation. Bronchoscopically, and at operation, the left main bronchial stenosis was in a healed state. At operation the left upper lobe bronchus showed gross evidence of activity and occlusion by exudate.

Such a method has been found and used. The experimental evidences and the clinical observations leading to its inception need not be recounted. They have been previously presented[1] along with the first four patients in whom tuberculous stenoses were reconstructed with dermal grafts. Figures 1 and 2 illustrate the x-rays of the

From the Thoracic Surgical Service, Leahi Hospital.
Read before the 59th annual meeting of the Hawaii Territorial Medical Association, May 6, 1949.

[1] Gebauer, P. W.: Plastic Reconstruction of Tuberculous Bronchostenosis with Dermal Grafts, to be published. Read before the American Association for Thoracic Surgery at New Orleans, La., March 31, 1949.

second patient so treated. This paper proposes to report the operative procedure with its recent modifications; to show why the postoperative bronchoscopic findings are sometimes difficult to appraise; and to record the first instance of tracheal reconstruction with a dermal graft.

Operative Procedure

The prone position, with resection of the fifth or sixth posterior ribs and division of adjacent ribs as necessary, is unquestionably the best approach. An elliptical piece of skin is removed from the back when the thoracotomy incision is made. Any size graft is thus obtained, and the resulting defect easily covered at the time of closure of the operative wound; undermining of the skin edges may be necessary if a large graft has been taken. The removed skin is then immersed in streptomycin-penicillin solution and set aside. The mediastinum is entered from behind, and the posterior surface of the stenotic bronchus and lower trachea exposed. These structures are freed no more than necessary, so that a maximum blood

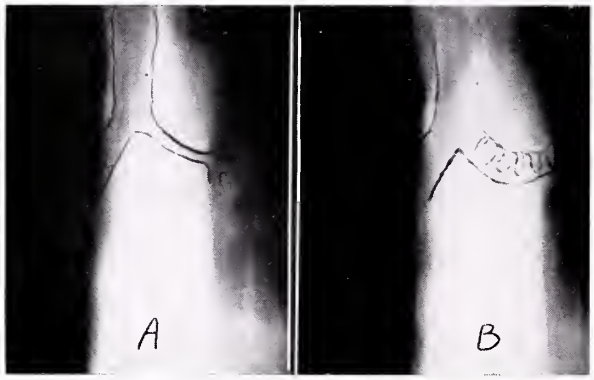


FIG. 2—Same patient as in Fig 1. A—planigram before operation demonstrates stenosis of whole left main bronchus and probable occlusion of left upper lobe bronchus. B—planigram two months after operation. Both films were marked to insure some illustrative reproduction.

supply is preserved. On the left side, good exposure of the lower trachea usually demands mobilization and retraction of the aortic arch, which, in turn, calls for identification and protection of the recurrent laryngeal nerve. When the involved bronchus and lower trachea are properly exposed, the anesthetist advances the intratracheal catheter as the operator guides it into the opposite main bronchus with a palpating finger. The posterior membranous wall of the stenotic bronchus is then incised lengthwise. The incision is carried well beyond the stenosis at both ends (Fig. 5—1, dotted line). The bronchial wall and its lumen are carefully inspected. The open bronchus is then packed with gauze previously moistened in streptomycin-penicillin solution. A paper pattern is cut and shaped to fit the bronchial defect in such fashion to restore a good bronchial lumen.

The skin obtained at the primary incision is clamped to a piece of splint wood. All subcutaneous fat is excised. It is turned over, and the epidermis removed with a razor. This leaves a thick patch of tough, elastic, dermal skin which is trimmed according to the paper pattern. At each end there is left redundant skin with which the graft may be manipulated. The fashioning of the graft may be the main factor distinguishing a good result from one not so good. It should be carefully and neatly done. It is a matter of judgment as much as measurement, and depends in part on the shape and degree of the stenosis to be grafted. Because of postoperative bronchoscopic appearances, some of the early grafts were considered too narrow and too flat. Consequently some of the later grafts were undoubtedly too large. I now feel that it is better to err on the small side, for a small graft will "take" and remain in place more readily, and some increase in bronchial lumen will be gained. A large graft is not likely to "take" as well, and it necessitates more tension on the bronchus. If the bronchus pulls away from the graft, stenosis will recur (Fig. 3—1, 2 and 3).

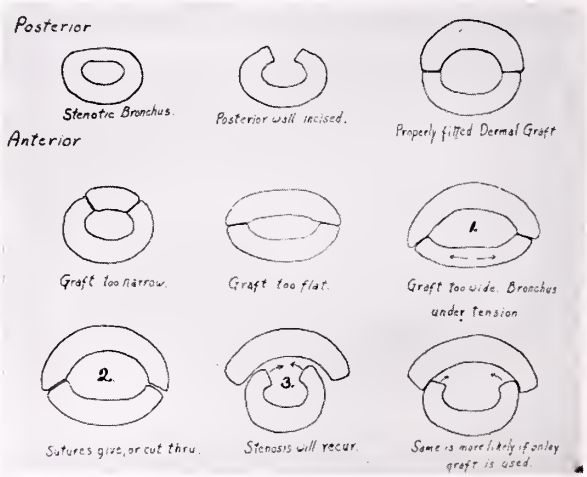


FIG. 3—Drawing outlines of bronchial cross-sections showing the principle of enlarging a stenosed bronchial lumen by inserting a dermal graft, and the necessity for properly shaped and fitted grafts. 1, 2 and 3 illustrate the effect of too much tension on the bronchus when a large graft is used.

A patch of dermal skin alone is too soft and pliable to form a semirigid portion of a bronchial wall. It must be provided with a skeletal framework to furnish stiffness. This has been accomplished by threading a stainless steel wire through the graft as depicted in Figure 4. The wire is

buried within the graft, except for short segments on the edges. Graft flexibility is not materially reduced in either axis. The ends of the wire are turned into minute rings so that no sharp point can protrude. Thirty gauge wire has been found more satisfactory than the 28 gauge first used. The use of strong push pins (Fig. 4) has been found helpful in placing the loops of wire through the substance of the graft at regular and even intervals. They also aid in shaping the loops, and permit the application of tension on the wire without distorting and stretching the graft, or deforming previous loops. The wire within the graft partly determines its size and shape. It should be meticulously inserted. The limbs of wire which traverse the width of the graft should be 5 to 6 mm. apart and longest where they will oppose the most stenotic area of the bronchus. They are shorter, and can be more separated, near the ends of the graft.

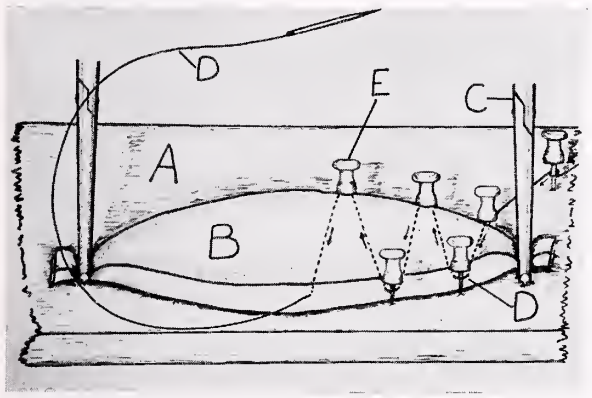


FIG. 4—Drawing illustrating the technique of inserting stainless steel wire into a dermal graft to provide a skeletal framework. A—splint wood, to which graft B, is fixed with clamps, C. D—30 gauge stainless steel wire which is laced through the substance of the graft as depicted by dotted lines. Push pins E, help form small outside loops on the edge of the graft to be included in the sutures which will later fix the graft to the bronchus. The pins also permit tension without deforming the graft or previous loops. Redundant skin outside the clamps is used to handle the graft, and is excised after it is sutured in place.

The prepared dermal skin is then sutured into the opened bronchus as an inlay graft (Fig. 5—3) with 00000 multistrand, atraumatic wire sutures. As often as possible, the loops of the skeletal wire which appear on the graft edge are included in these sutures, thereby anchoring the wire framework within the graft to the bronchus. The extreme ends of the graft are actually "onlays," for they are brought out of the bronchial incision and fixed to the intact posterior bronchial surface with mattress sutures (Fig 5—3). Before completing the sutures at the distal end of the graft, a large cervical dilator, or other suitable cylindrical instrument, is inserted into the bronchial lumen beneath the graft, whereupon the latter is moulded over the round surface of the dilator with finger pressure. This maneuver curves the wire loops within the graft and gives it a semitubular shape, thus providing a round bronchial lumen, in contrast to a slit which would result if a flat graft were applied. Similarly, a tracheal graft can be moulded over an underlying intratracheal catheter.

After removal of the dilator and completion of the sutures, the anesthetist draws the intratracheal catheter from the opposite main bronchus

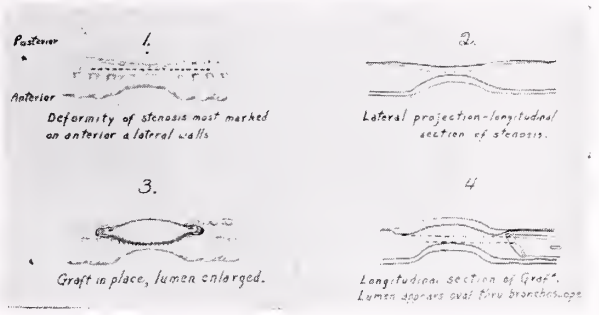


FIG. 5—Drawings of the usual deformity encountered in bronchostenosis, showing the effect of loss of the supportive cartilages, and how transposition of the bronchial lumen to a more posterior plane occurs after a graft is applied. 1—dotted line indicates site of bronchial incision on posterior membranous wall. 2—shows how deformity produces stenosis which is more marked from anterior and lateral walls. 3—shows how the graft is sutured into the bronchial incision; most of it is inlaid, the extreme tips lie on the posterior bronchial surface and are fixed there with mattress sutures. 4—shows why the postoperative bronchoscopic appearance is sometimes unsatisfactory or puzzling.

into the lower trachea, and then applies positive pressure to test the grafted bronchus for patency and air leaks. So far, no leakage has been encountered, and the lung or remaining lobes have inflated and deflated readily in all cases. Very narrow strips of gelfoam are applied over the suture lines, as further insurance against air leaks, but especially to cover the knots in the wire sutures, particularly where the suture line approximates the pulmonary vessels. The main surface of the graft should not be covered with gelfoam, for it is hoped that it will develop some blood supply from the mediastinal tissues and adjacent lung.

The skin side of the graft, actually the cut surface of the skin from which the epidermis has been removed, is applied facing the bronchial lumen to offer this surface as a bed for the ingrowth of bronchial epithelium from the incised margins of the bronchus. This surface is considered more suitable for such growth than the subcutaneous surface, and certainly superior to a surface of intact skin.

Early Results

So far eight grafts have been applied in seven patients. Total pneumonectomy, by present standards, was indicated in each patient because of severe bronchostenosis, and avoided by use of the above procedure, so that these seven patients now harbor a total of twelve intact, functioning lobes, probably free of active disease. However, in one patient too large a graft was used, and the most stenosed area of the bronchus detached itself in a patient who has been discharged with an otherwise excellent result.

In general, the clinical results have been particularly good, but early in our experiences the bronchoscopic appearances after operation were sometimes rather discouraging. Despite apparent good "takes," and early epithelization of the grafts, the nice bronchial lumens obtained at operation did not persist. One could not peer through the grafted bronchus from the lower tra-

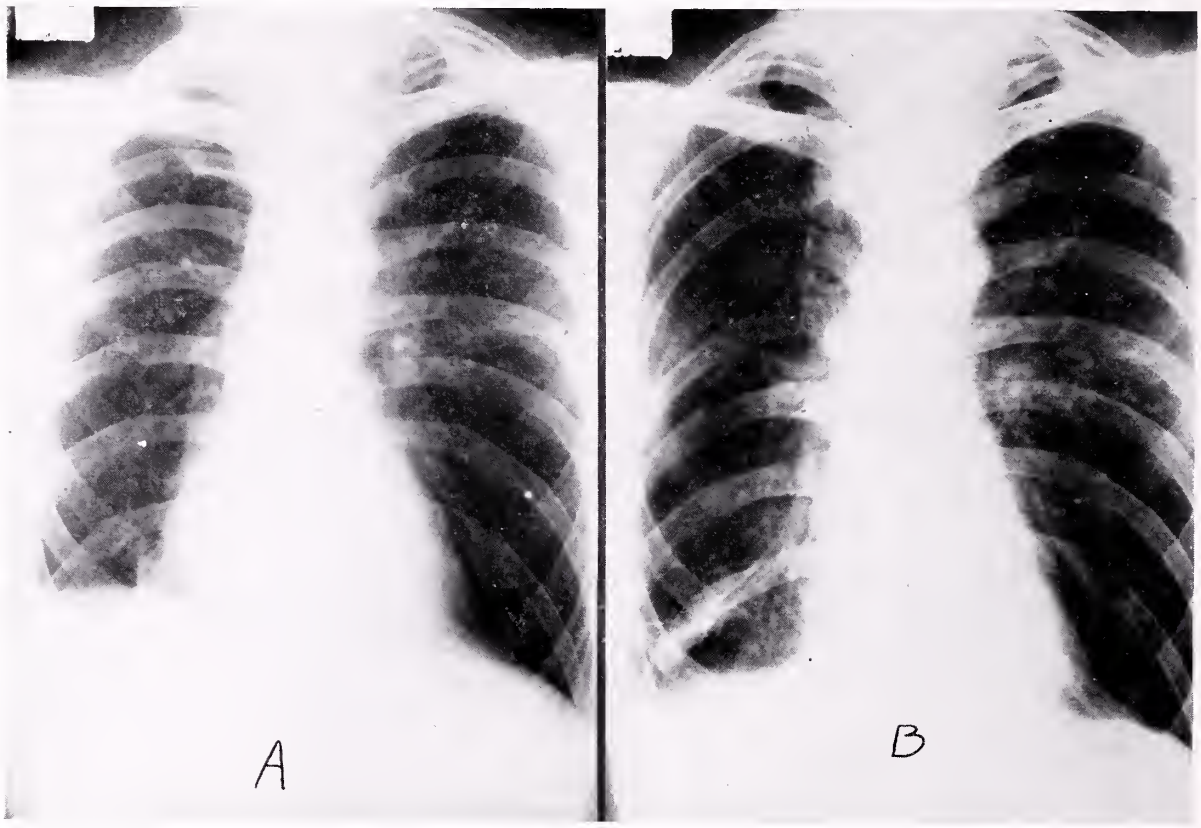


FIG. 6—Reproduced x-rays of patient M. T., herein reported. A—x-ray before operation. Sparsely scattered, hard infiltration both upper lobes with bilateral dense apices above the clavicles. Probable atelectatic segment along lower right heart border. B—6 weeks after dermal graft to lower trachea, and dermal graft to right lower lobe bronchus. Right posterior ribs 4, 5 and 7, have been divided; the sixth has been removed. It shows regeneration laterally. Right lung is well expanded. There is a residual traumatic pleurisy at the base and some clearing along the lower right heart border.

from the graft, resulting in a recurrent stenosis of moderate degree (Fig. 3—1, 2 and 3). A satisfactory airway has been obtained by bronchoscopic dilatations, so that it is now possible to pass a scope with a lumen of 5 mm. beyond the stenosis. Atelectasis has not occurred and I believe the ultimate result will be satisfactory. This patient's sputum was negative before operation and it is still negative. One other patient is also still negative. Four patients had positive sputums before operation and are now negative. There is one case of persistent vocal cord paralysis evidently due to stretching of the left recurrent nerve, chea; the lumen appeared oval or slit-like (Fig. 5—4). The scope had to be "wormed" through the lumen. It was always possible to get a scope beyond the graft, so a fairly good lumen must have existed. It was also difficult to obtain satisfactory planigrams of the grafted bronchi. In such x-rays the wire within the graft appears fuzzy because of the transmitted cardiac motion during the exposure; this was understandable. However, with the lower trachea or opposite bronchus in focus, the grafted bronchus was invariably out of focus. At a recent operation, the deformity of the stenosis was so clearly demon-

strated that the cause for the poor planigrams and puzzling bronchoscopic findings immediately became apparent. It is illustrated in Figure 5, and is the result of transposition of the bronchial lumen to a more posterior plane in the region of the graft. This might not be very evident at the time of operation, with the chest open, and the bronchus under tension. I believe the alteration becomes more pronounced with the postoperative readjustment of the thoracic contents to a normal position.

Such circumstances may prove to be rather common, for a stenosis is likely to be most marked on the anterior and lateral aspect of a bronchus. Collapse and contracture of this portion of the bronchial wall occurs secondary to the loss of its supportive framework, namely, the cartilage rings. Dissolution and absorption of these structures may follow the chondritis accompanying the original tuberculous inflammation. This mechanism produces the greatest part of the deformity at the previous site of the bronchial cartilages, and has not been allotted due attention in the pathogenesis of bronchostenosis.

Case Report

M. T., a Japanese man, age 34, had bilateral pulmonary tuberculosis which first required hospitalization in 1934. During the following nine years there were three more hospital admissions. Artificial pneumothorax was used on both sides with fair success, and the right phrenic nerve was crushed on three occasions. The present hospitalization began in 1943 because of a positive sputum and active tuberculous laryngitis. He was given symptomatic treatment and the larynx was repeatedly cauterized. In October 1946 a bronchoscopy was done; only the trachea was examined, and no ulcerative areas were noted. A month later the sputum was still positive. A year later it was negative, but active ulcerations in the larynx were noted on direct laryngoscopy. A course of streptomycin, totaling 84 grams, was given in a three-month period ending in March 1948. Before this treatment, there had been the usual symtoms of tracheobronchial inflammation and obstruction, including troublesome cough, wheeze and frothy sputum. They persisted, but lessened in severity after streptomycin. At the same time the larynx healed; the sputum remained negative, and chest films showed bilateral fibrotic scars with apparent healing (Fig. 6,A).

Despite this, and the fact that his sputum had been negative for two years, he was reluctant to be discharged because, in January 1949, his old symptoms increased in severity with more wheeze, periodic difficulty in breathing, and cough productive of two cups of frothy sputum daily. Bronchoscopy revealed a severe stenosis of the lower trachea, which precluded further passage of the scope. The lumen was very irregular and was approximately 4x7 mm. It almost occluded on forced expiration. This lesion was demonstrated in planigrams (Fig. 7, A and B), as well as another more severe stenosis of the right lower lobe bronchus. A marked wheeze in both phases of respiration, and loud rhonchi were audible over both lungs and the trachea. These findings were more prominent at the right base. The patient was quite willing to undergo anything that offered a prospect of relief.

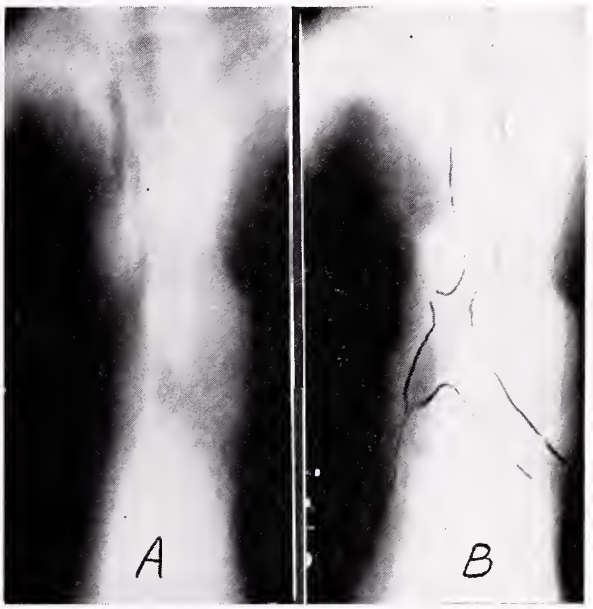


FIG. 7—Planigrams of trachea and bronchi of patient M. T. before operation. A—unmarked. B—same, retouched, shows stenosis of lower trachea, and severe stenosis right lower lobe bronchus.

Under anesthesia, induced with cyclopropane and maintained with ether-oxygen plus controlled respiration, right thoracotomy was done. After the trachea was opened, the anesthesia was supplemented with intravenous sodium pentothal. The tracheal lumen measured 6 mm. at the stenosis. The intratracheal catheter was drawn down from above the stenosis, and inserted into the left main bronchus. A dermal graft was then prepared and sutured into the tracheal incision. The stenotic right lower lobe bronchus was then incised. The deformity was about one inch in length, and the lumen 3 mm. in diameter. Another dermal graft was fashioned and sutured into this bronchus. Some emphysematous blebs and subpleural air cysts were excised from the extreme apex of the upper lobe. Thirty gauge wire was used to form the skeletal framework of both grafts. It was not well inserted. However, a good tracheal and good bronchial lumen were obtained, and the right lung inflated and deflated readily after the tracheal catheter was drawn up out of the left main bronchus.

Postoperatively the right lung expanded and aerated immediately, and the clinical course was good. Breath sounds disappeared over the right base on the sixth day. Fluoroscopy did not indicate atelectasis, but bronchoscopy was done, and some clotted blood aspirated from the right lower lobe bronchus at the distal end of the bronchial graft. Breath sounds were audible immediately after this procedure. Seven weeks after operation bronchoscopy was done again. Both grafts appeared to be viable and covered with epithelium. The tracheal result was excellent and a large scope could be moved easily through the previous area of stenosis. At

the distal end of the bronchial graft the lumen was narrow and just admitted a scope with an internal diameter of 5 mm. At times, the collection of mucus at this point produces loud bubbling rhonchi, which clear with coughing. As a rule, normal breath sounds are audible over both lungs. In general, the chest physical findings are much improved. There is no wheeze or dyspnea. There is still a moderate bronchorrhea with one cup of sputum per day. This has been the case in other patients, in whom the sputum volume and cough gradually lessened, and finally disappeared after three to four months. Bronchorrhea is usually increased for approximately a week following bronchoscopy.

This patient was operated over two months ago and has been ambulant since the first postoperative day. Sputum examinations have been negative, except for one three-day concentrate. This specimen is considered to have come from a basal segment along the right heart border, which has opened up and is aerating since operation. Before this it appeared atelectatic and its bronchus was probably occluded (Fig. 6, A and B). There may be some active infiltration in this segment, but no cavity is visible, and the positive sputum has not been confirmed. Postoperative planigrams (Fig. 8, A and B) were not very satisfactory and were difficult to copy. The bronchial graft is at least 3 cm. posterior to the tracheal graft and both are hard to get in focus.

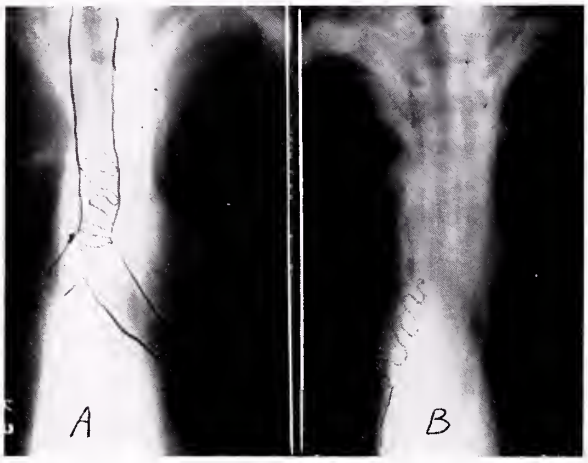


FIG. 8—Patient M. T. Retouched planigrams after operation. A—the trachea was fairly well outlined. B—at a more posterior level the right lower lobe bronchus was poorly visualized.

Comment

Possibly in years or months to come, stenoses will recur in grafted bronchi. However, this is now regarded as unlikely. If failure of the procedure occurs at all, probably it will be in the first few months. In fact, evidence to date indicates that more improved, and more natural bronchial lumens will eventuate. It is not beyond the realm of nature for time and cellular activity to replace the grafted derma with tissues resembling the elements of the bronchial wall.

Even if this method should ultimately prove inadequate, it has opened the door to a new surgical field. It indicates that tuberculous bronchostenosis is amenable to some sort of plastic surgery, and that it does not always require resection. This procedure may foster the beginning of surgical endeavours to correct tracheobronchial lesions other than the tuberculous. Should it do no more than that, it remains worthwhile.

Discussion

DR. LESTER YEE: Dr. Gebauer and the staff of the Leahi Hospital are to be congratulated for their contribution to the important subject of the treatment of stenosis of tuberculosis of the bronchus. I had the good fortune to scrub in with Dr. Gebauer on several of his operations, the indications and technique of which he has so adequately presented to-night.

The treatment of tuberculosis of the bronchus and its sequelae, per se, have been quite unsatisfactory in many instances. Numerous methods of treatment have been advocated. Periodic bronchoscopy with topical cauterization by various agents has been the treatment of choice until the advent of streptomycin. Streptomycin to-day is a specific for bronchial tuberculosis. I have seen the lesions in the bronchus actually melt and disappear within one-two weeks of streptomycin treatment. Of course, this is assuming in all instances that the parenchymal disease is under control.

Despite streptomycin however, the sequela of tuberculosis of the bronchus, that is, stenosis, still remains. Although the incidence of stenosis of the tuberculous bronchus is probably slightly less frequent with streptomycin therapy, nevertheless, the present mode of therapy for stenosis still requires improvement. There are two means of treatment in vogue in all big clinics to-day. First, periodic bronchoscopy with dilatations—really a temporary measure, because dilatation procedures must be kept up permanently at various intervals. Although bronchoscopy is a relatively innocuous and simple procedure if performed correctly, it still remains a burden to many patients. The other is the more radical procedure and justified in many cases as a heroic, life-saving measure, that is, extirpation of the lung tissue distal to the stenosed bronchus. With pneumonectomy, the fatal results of stenosis of bronchus are prevented, that is, the suppurative gangrenous lung due to lack of drainage from the stenosed bronchus is removed before septicemia and its dire results occur.

With Dr. Gebauer's contribution, there is available to-day a direct mode of attack on the stenosed bronchus—an ideal method of treatment if results could be made permanent. Even if results are temporary, I am sure that it is a distinct contribution, in that we are attacking the source of the trouble directly. However, I would like to have seen broncho-spirometric studies on the lungs of these patients because I am curious to know whether the lung function is really improved by the operation in such cases. We know that the tuberculous lung under a long standing pneumothorax is fibrosed. Even after decortication with release of the captive lung, the oxygen uptake and saturation are at times much less in the lung post-decortication than pre-decortication. I reported these studies on such a patient before the American Thoracic Association last year at the Montreal meeting.

I again say that Dr. Gebauer and the staff of Leahi Hospital should be congratulated on this important contribution.

Behavior Problems in Pediatric Practice

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IN THE past century and especially in our lifetime there has occurred tremendous progress in the physical and biological sciences. It may even be that humanity is entering a new era as far as knowledge and control of the material world are concerned. With our scientific colleagues we can rejoice in the exploration and exploitation of the physical world which give promise of fulfilling human aspirations beyond even the dreams of past generations. We as physicians, too, can rightly be proud of our part in this scientific progress, and of the contributions which our profession has made toward the health and happiness of the world.

But when it comes to solving human problems —the prevention of crime and mental illness, the care of the handicapped and the misfits, the treatment of psychosomatic illnesses, and the prevention of war—how are we doing? We have just gone through a war which, in human slaughter and destruction of wealth, has exceeded all natural and man-made catastrophes of recorded history. It has been estimated that in World War II 40,000,000 people lost their lives and that material loss was 4 trillion dollars! Not only that, we must now face the fact that human genius has placed in the hands of us human beings potential power which is almost infinitely greater than we have possessed in the past and which as yet we apparently have neither the knowledge, the emotional maturity, nor the social organization to control. No longer is it just the frustrated, the ignorant, or the emotionally warped who predict the imminent end of the world; our scientists, those people who have the most facts and who are best trained to think logically and objectively, warn us that unless we can learn to direct human forces and control human hostility and destructiveness, there is a possibility of the destruction of our civilization if not of humanity itself.

There are those who maintain that the future is dark, that we can't change human nature, and that the world's only hope is in another mutation like the one which occurred thousands of years ago when homo sapiens replaced the Neanderthal man.

It is, of course, possible that in some thousands of years a new man will emerge, a man with a strong social conscience who can live according to reason and will not harm or kill his neighbors. But before we succumb to such pessimism, let us ask ourselves whether our loved ones, our friends, and the many people we have learned to respect and admire are not living proof that raw human material is capable of attaining fine human character. Let us also investigate the possibility that one reason civilizations in the past failed to solve their human problems was that they had little or no understanding of the inner workings of the human being. We all know that from the biological standpoint millions and millions of people have lived and died without the slightest understanding of the physicochemical and physiological processes on which their life depended. Similarly, from the personality standpoint, millions and millions of people have grown up, worked, fought, and succeeded or failed with little or no understanding of why they thought and felt and behaved as they did.

Psychiatric Research

It has only been in recent years that scientifically trained minds have been extensively applied to the study of the human being as a person. We have only begun to understand the factors which determine personality development and human behavior. Parents and teachers, as a whole, have not yet been led to understand the emotional development of their children. This in spite of the fact that the emotional foundations of personality development are laid down in early childhood: feelings about the self, feelings about other people, feelings of right and wrong, feelings about the world in general—all of these being feelings which are basic in personality functioning.

Perplexity and fear are causing people to turn to students of human behavior for solutions to the world's present predicament. The fact, however, is that psychiatry does not have a ready solution. Even if society could agree on what kind of a human being is desirable and even if a group of psychiatrists could determine how to produce such a person, the process would require much time. It takes generations of education and training to change the habits, thinking, and attitudes of a people. It is only human nature for parents to

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attempt to mold their children into patterns which they themselves were taught in their childhood, and for societies to attempt to solve their current problems with methods which were applicable to the problems of the past. This works in a static society, but in a changing world order such as we have today, such methods are proving to be ineffective. Our leaders today, as has been true with wise and far sighted leaders of all ages, have to deal with the cultural lag, both intellectual and moral.

I believe, however, we can take hope in the scientific spirit of our age. We need not less science in our world, rather we need to apply to a much greater extent scientific methods to the problems of human development and human behavior. While cherishing the wisdom and the ethical and moral values of the past, we must continue to gather facts, formulate theories, and prove or disprove these theories by experiment.

The public must be led to understand this need for research in the field of human behavior, both individual and group. While our statesmen are attempting to prevent war by the traditional means at their disposal, we must make use of the breathing spell thus afforded by inaugurating extensive, coordinated, and well supported psychologic and sociologic research. In the physical sciences we have gotten far beyond the time when progress was determined by half starved professors slaving in an attic with a $500 grant. Nowadays we train thousands of brilliant young people for physical research. We spend millions for brains and equipment. We spend millions to try out discoveries. We spend millions to sell scientific applications to the public. Is there any reason to believe that research of such scope in the field of human nature will fail to give us a better understanding of the factors which mold human personality and thus enable us to harness human forces for the welfare of mankind?

In such a research program, the interest and cooperation of every physician will be needed. There can be no doubt that every physician who deals with children has observed facts about parent-child relationships, the emotional development of children, and the relationship between emotional disturbances and physiological dysfunctions which are worthy of note. Yet until recent years the pediatric literature has been practically devoid of such observations, probably because of the feeling that they were unscientific.

Psychiatry and Pediatrics

Pediatricians, no doubt, have had good reason to be skeptical about psychiatric theories of the past. They have been quite justified in their query as to how they can know whether what the child psychiatrist tells them is true or not. The source of the skepticism has been more than the psychiatric language barrier which has made an exchange of viewpoints between the pediatrician and psychiatrist almost impossible.

Forty years ago, the pediatricians point out, mothers rocked and cuddled their babies. Then came along the child guiders who recoiled in horror at such maternal behavior and exclaimed, "Tut, tut! What ignorant mothers! They must not be allowed to do that! They must not pick their babies up, or comfort them, or show them too much affection. If they must kiss their children they should give them just one peck on the forehead, not more than twice a day, and only that if the child has done something to earn it."

And now, the pediatricians continue, the child psychiatrist comes along and tells us to forget it, that babies need mothering, that children become starved emotionally if they do not experience a mother's love. But even psychiatrists cannot agree. We have also been told that The Great American Mom almost lost the last war! What are we to believe?

And one hundred years ago, the pediatricians further point out, no one gave a hoot if a house in which there were babies reeked to high heaven with urea, indole, and skatole. And then the psychiatrist came along and said, "What utter neglect! Do you want enuresis and encopresis to last forever? Children must be trained to the toilet early, the earlier the better." But when we confidently started children out on a training program beginning at two or three months, the psychiatrists disoriented us again by crying, "Hold everything! Forget what we told you. Children can't become toilet trained until there is cortical control of the excretory sphincters. Children will learn to use the toilet when they are good and ready. You might just as well wait until the child says, 'Mother, is it yet permissible for me to utilize that plumbing fixture too?' That way you will avoid anal sadistic fixations." What indeed are we to believe?

Well, child psychiatry is not the only science which has had its errors, untenable theories, controversies, and shifting points of view, but out of such processes gradually emerges a more or less tested and reliable body of knowledge, and in this, too, psychiatry is no exception. There is quite general agreement that we now know some of the fundamental principles of mental hygiene. Child guidance experience, too, gives us hope that the application of mental hygiene principles

in daily living in the home, in the school, and on the playground will greatly contribute to the socialization, happiness, and effectiveness of the next generation. In fact, we will probably never make any great progress in cutting down crime, mental illness, and social upheaval until these principles *are* incorporated into the everyday thinking and living of people everywhere.

In the application of this knowledge to daily living, the pediatrician and the general practitioner are in a position to play a major role. The time is far distant, if indeed it will ever arrive, when there will be enough psychiatrists to deal with all of the emotional problems of maladjusted children and their parents. More psychiatrists and more mental health and child guidance clinics, much as they are needed for research, education, and the treatment of seriously maladjusted individuals, are not the only solution to the problems we face. The most effective program in the long run will be the training of all physicians to deal constructively with the common emotional disturbances in living and to understand the emotional development and needs of children as well as the best methods of handling the everyday problems of the everyday child, so that this knowledge may be transmitted to parents and teachers.

Prevention of Emotional Disturbances

In pediatric practice, whether that of the general practitioner or specialist, the physician sees several critical developmental periods when things can and often do go wrong for parent and child. It is when troubles are beginning—and before—that the physician's influence is most beneficial.

One of these critical periods is before the birth of the baby when the mother's own personality adjustment and her developing attitude toward the coming infant set the emotional background for the emotional development of the child. Many mothers need help at this period. Most suffer from unnecessary anxiety about the dangers of delivery. Some worry about the child's inheritance. Some are confused by mixed feelings concerning their situation. There are those who are resentful because they do not want the child. Not a few feel guilty because they cannot welcome the coming child. A chance to talk over their fears and perplexities with an understanding, sympathetic, and uncritical physician is often a highly constructive experience for such parents. By allaying anxieties and relieving the mother of feelings of guilt, the physician helps the mother to look forward to the baby's arrival with pleasure or at least to plan for the child less hampered by emotional conflict.

Soon after the arrival of the baby, the anxieties of the inexperienced mother come rushing to the fore. Her first concern, of course, is about the normality and health of her child. Her next is about her own lack of knowledge and experience. For several weeks a mother with her first baby is very dependent upon her physician. The period of hospitalization can often well be utilized in giving the mother opportunity to become used to feeding and caring for her child and in preparing her for the situations with which she will soon have to deal. The help of the physician also should follow the mother from the hospital into the home until she has learned to manage her baby with efficiency and security.

The emotional foundations of the child will be made more secure, too, if the physician helps the mother over the humps of the habit training period. The uninformed or misinformed mother is most likely to make issue of matters which result only in balkiness on the part of the child and frustration on the part of the parent. The conflict often starts with emotional upset over the time of nursing and the amount of milk taken. After that, conflict is centered successively upon the introduction of solid food, the amount and kind of vegetables served, and the amount of milk taken. From thence the struggle shifts to the matter of toilet training, after which a portion of it is shared by the daily controversy about the nap. Parents and child, therefore, too often find themselves locked in a struggle which not only defeats the parent's purpose in habit training but is also anything but conducive to happy home life and the normal emotional development of the child.

Most of this conflict in early childhood can be avoided if the mother can be given some confidence in the child's inherent drive for normality and if she can acquire a working concept and knowledge of human growth. Every mother wants to know what behavior is within normal limits at each stage of her child's development. Although the mother may need help in determining the physiological, intellectual, and emotional readiness of her child to adopt a more mature type of behavior because of individual differences in rates of growth, it is usually better to encourage the mother to observe her child for evidence of his readiness rather than to give her a chart of normal development to follow. It may be that due to her ambition for her child the mother must be warned that she cannot hurry growth. But when the child is ready to take the next step toward adulthood, behavioral growth will be further facilitated if the mother can be helped to take advantage of the

fact that desirable behavior becomes habitual because it results in satisfaction to the child more than because it is enforced day after day.

With good pediatric advice, most parents get through the first year or eighteen months without difficulty. Usually they consider their offspring of this age to be too cute for words. For one thing, he stays put. For another, he is amenable to suggestion.

During the second year, however, the situation changes. The child now begins to say, "no" and "I won't." He begins to insist on planning and doing things for himself, and to resist plans of action forced upon him. Some day during this period when papa comes home from work, mama says, "Daddy, I just don't know what is getting into our Johnnie. He has been so naughty of late. He gets into everything and he just doesn't seem to want to mind me any more." Whereupon father looks serious and replies, "Hum! I guess this is it! It must be the old nick in him. The badness must be coming out. By the way, your brother got into some trouble didn't he?" To which the mother retorts, "Yeah, and your father was no angel was he?" But our young parents are brave. They decide to meet head-on any evil tendencies they see in their child and to nip them in the bud. So they start nipping.

This is another critical situation in which serious trouble can often be prevented. Johnnie's parents need to know that his behavior should be no cause for alarm. They should, as a matter of fact, rejoice at his behavior, for it is evidence that he is growing up emotionally. He is growing in independence. He is discovering that he has a mind of his own and of course he loves to exercise his new-found powers. And he should be allowed to do so within reason, for it is practice which develops skills and makes perfect.

Johnnie's parents can make two mistakes at this stage of the game. One is to become alarmed, cowed, confused, or too submissive, thus allowing Johnnie to get the upper hand in the household. The other is to come down on him like a ton of bricks and thus scare him out of a few months or years of emotional growth.

The crucial problem the parents at this period face is how to teach the child that there is such a thing as authority which must be respected, and that there are certain things which can be done and certain things which cannot be done, and yet, at the same time, leave the way open for the child to experiment, to profit by mistakes, and to grow in self confidence and independence. Uncertainty or too much permissiveness on the one hand may result in a "spoiled child" reaction. Too much domination or thwarting on the other may result in prolonged negativism or rebellion. Parents often need help in striking a balance between these two extremes. They need to discuss with their physicians such topics as what behavior can best be ignored, what should be stopped, what should they expect and demand of their child, where must one draw the line, and how best can one enforce the decisions?

Unfortunately there are no clear-cut answers to these questions. Usually the right answer depends upon a good understanding of the emotional atmosphere of the home. Not infrequently both the parent and physician must find the appropriate answer for an individual child by experimentation. Probably, also, few parents can come to exactly the same conclusions.

Many parents, however, especially overly ambitious and conscientious ones, have to be weaned away from a perfectionistic attitude. Such parents, often unaware that they are doing so, struggle, always futilely, to hold their children to adult standards. They must, however, be helped to realize that children are not little adults, for children don't think like little adults, they don't feel like little adults, and they can't behave like little adults, except for short periods and under strong pressure. Holding up before a child standards which he cannot meet results in frustration, anxiety, hostility, and loss of self confidence. A child must be allowed to be his age. He must be permitted to experience the satisfactions and solve the problems of *his* stage of development—not those of the adult. It is only thus that he acquires the motive and the self confidence necessary for him to grow behaviorally.

At about age four or five, parents are often confronted with their child's curiosity and investigation about sex. Because of the strong feelings of anxiety and guilt about sex which most parents themselves acquired in childhood, parents often need help in handling the sexual problems of their children sensibly and constructively. The parent's dilemma is how to help the child acquire and adhere to socially acceptable standards of sexual conduct without acquiring attitudes regarding sex which in adolescence and adulthood may interfere with normal sexual development and the eventual attainment of a happy marriage. Again the parents need faith in the child's inherent capacity for normal sexual development. Other factors which help parents and children over sexual difficulties are a straightforwardness in giving children the sexual information they need, an understanding of the child's feelings, respect for proper conduct and marriage, and above all the

maintenance of a wholesome home where the child learns the real meaning of love.

There is one more critical period which we must consider before we can assume that the child has gotten off to a good start in life. This is the first two or three years of the school age. During this period occurs the beginning break from complete dependence upon the home, and the child's interests and activities branch out into community life. There is the necessity now to make friends, to learn to respect the rights of others but to defend one's own rights, and to learn to play cooperatively. The child is also required to obey the teacher, conform to class routine, apply himself to school tasks, and begin to learn to read and write.

The ease with which the youngster is able to make good social and school adjustments depends partly upon the degree of physical, intellectual, and emotional maturity he has attained and partly upon the type of emotional relationship which he has so far established with his parents and siblings. A child, for instance, who is harboring great hostility toward his parents is likely to have difficulty in establishing a good relationship with his teacher, and children who have not yet worked through their rivalries and jealousies with siblings are apt to carry over these difficulties to the playground.

In helping children with their social and school adjustment, the physician will probably have to work cooperatively with both the mother and the teacher. The services of a psychologist also may be needed to determine whether the child is ready for school work and what his capacity for school progress is.

Five to seven or eight is an age period when, in the writer's experience, many mothers first seek child guidance aid for their children. Accumulating difficulties by this time have come to a head, and anxious, frustrated mothers are often quite eager to take part in treatment. The referral of seriously maladjusted children should not be delayed to later years, for at early school age undesirable emotional trends are often still highly reversible. Certainly a good start in school is of primary importance in the long education process the child is expected to complete.

Conclusion

There is no implication in what has been said that the pediatrician can be expected to prevent all behavior problems or treat successfully all those which arise in his practice. Behavior problems and children are practically synonymous. In fact, normal living is largely a process of solving one problem after another. So a great deal of the behavior for which mothers often seek advice need be no cause for alarm. What is of significance is the tolerance which the parents have for childish behavior and whether the home emotional atmosphere contains the love, security, stimulation, and example necessary for the child to find satisfying as well as socially acceptable ways of fulfilling his emotional needs.

There will, of course, be situations which the pediatrician has neither the time nor the training to handle. There will be parents who cannot accept or make use of advice, even good advice. There will be parents so maladjusted that their children can be helped only if they themselves can benefit from psychiatric treatment. Home atmospheres will be found so pathological that only in intensive and prolonged family case work can there be hope of amelioration. There will even be parents who are unable to make use of a child guidance clinic, and families which are beyond the therapeutic resources of the community. The psychiatrist, no less than the pediatrician, has to learn to accept philosophically his own therapeutic limitations.

Be that as it may, the fact remains that the pediatrician and general practitioner have an important part to play in a total mental hygiene program. The measures outlined in this paper are not exclusively psychiatric, they are a part of good pediatrics. The time is coming and is already here in a few medical schools when experience in a child guidance clinic will be a part of pediatric training.

Hawaii's First Hospitals

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HONOLULU

THE history of Hawaii's hospitals prior to 1860 is little known, but full of color and interest. Captain Cook, who discovered the Islands for the West in 1778, found most medical care in the hands of the *kahuna*. Early white settlers had to rely on ships' physicians. The first resident physician in the Hawaiian Islands was Dr. Thomas Holman, who arrived at Kailua, on the Big Island, with an early band of missionaries, April 4, 1820. The following four decades witnessed the establishment of modern medicine in Hawaii, the opening of the first small hospitals, and the creation, in 1850, of the Board of Health.[1] These forty years, which ended in 1860 with the completion of the oldest surviving hospital in the Territory, comprise the earliest period of local hospital history.

A first step toward the establishment of a hospital was made in Honolulu in 1833. Before then, "sick and distressed British subjects and seamen were boarded by such different individuals as could be found to undertake the care of them—sometimes in the hovels of natives, and sometimes in those of foreigners. At or about this period [1833], their board was contracted for by an Englishman keeping a public house, with whom they were placed until 1840. During this time, their abode was miserable in the extreme, although as good as could be procured; the hovel they were lodged in being scarcely more than shelter from the rays of the sun—but really, hardly any from the rain or wind, without any conveniences or comforts necessary for invalids, except such as were supplied by the medical attendant, and charged to the British Government as medical comforts."[2] Crude as it was, this establishment was dignified by the name "British Hospital for Seamen."[3]

The first real hospital in the Hawaiian Islands was put into operation in Honolulu in 1837. "A convenient establishment, at Waikiki, has been rented by the U. S. Consul, for the past year, for the accommodation of the seamen upon his hands," wrote John Diell, adding that "the situation of the sick has been far more comfortable than it was, when they were quartered in a grog shop, in the town, as was formerly the case."[4] This hospital admitted 266 patients in the five year period ending March 31, 1844, of whom only ten died.[5]

The first real hospital for British seamen was put into operation in April 1841. This establishment was "a thatched building, perfectly pervious to the winds—so much so that in cases requiring particular attention, they have to seek the shelter of an old garment or mat, hung up against the side of the house, to ward off the damp wind, during the inclement season. It is also situated in the same enclosure with a common grog-shop, in the most noisy part of town; subject to the noisy and often dangerous intrusion of drunken sailors. . . . There have been 77 men *subsisted* during the last 37 months [i.e., April 1841 through April 1844], for 7,129 days, giving an average of nearly 92 and a half days for each man. Previous to July 1842, the charge for subsistence was 43 cents each man per diem; but this not being found adequate, it was increased to 50 cents per diem, which is the rate now paid."[6] This "Hospital for English Seamen" was located in Honolulu on the ewa-makai [west—Ed.] corner of Nuuanu and King Streets.[7]

The third foreign nation to make provision for its seamen in need of medical attention was France. A small hospital was established, probably early in 1845, on the waikiki [southeast—Ed.] side of Smith Street at the Honolulu waterfront.[8] It was the smallest of the marine hospitals. In 1846, when the American Hospital cared for 156 "inmates" and the British Hospital 63, French Hospital reported a total of only 9 inmates.[9] It was apparently closed before 1855.[10]

Hospitals for American seamen had in the meantime been opened in Lahaina, Maui and

* Public Health Analyst, Public Health Committee, Honolulu Chamber of Commerce.

Read before the 59th annual meeting of the Hawaii Territorial Medical Association, May 7, 1949.

[1] "Early Hawaii Medicos," *Hawaiian Annual for 1933*, pp. 53-56.

[2] J. Chas. Byde Rooke, M.D., in *The Friend, of Temperance and Seamen*, Honolulu, July 1, 1844, p. 62f.

[3] *Polynesian*, October 17, 1840, p. 74.

[4] "Sketch of Honolulu, Oahu," *Hawaiian Spectator*, Vol. I, No. 2, April 1838, pp. 86-87.

[5] Dr. R. W. Wood in *The Friend, of Temperance and Seamen*, Honolulu, July 1, 1844, p. 62f.

[6] Dr. Chas. Byde Rooke, *loc. cit.* "The admissions to medical care above referred to during the 37 months ending 30th April 1844, were 71 . . ." These data indicate an average daily census of 6.3 persons, and an average length of stay for all persons of 92.6 days.

[7] Map published in *The Friend*, October 1, 1845.

[8] *Ibid.*

[9] *The Friend*, January 15, 1847, p. 12.

[10] No further mention can be found of French Hospital after 1847.

Hilo, Hawaii. The U. S. Hospital in Lahaina was probably in operation by 1843, continuing until after 1860.[11] It occupied a two-story building which was still standing in 1901.[12] The Hilo institution opened somewhat later: "In 1855, Dr. Wetmore established a Seamen's Hospital, for which purpose he had purchased a house on Ululani Street. Dr. Wetmore received his first patient on September 18, 1855. One dollar and twenty-five cents was charged per day. This included medical attendance, nursing, medicine, board and laundry. The bills were paid by the U. S. Government." There was less need of a seamen's hospital in Hilo after the decline of the whaling industry, and Dr. Wetmore put his building to other uses about 1863.[13]

Little Greenwich Hospital, replacing the hut at Nuuanu and King, was opened early in 1846.[14] Built by the British Consul General in Pauoa Valley, it represented a considerable improvement for the English seamen who were its chief occupants.[15] This hospital must have been considerably larger than its predecessor, for it cared for 63 patients in the one year 1846, compared to 77 in three years at the old location.[16] The "Rules to be strictly observed at Little Greenwich Hospital" were considerably stricter than in the past: alcohol, smoking and women visitors were prohibited; no inmate was allowed "to be absent from the hospital after sunset, or to go into Honolulu without permission from Dr. Rooke or Mr. Booth;" and "such men as are well enough" were enjoined to "keep in order the grass-plot in front of the hospital" and to "wash for, and attend upon, their comrades who are bedridden or disabled." Patients were required to attend Divine Service. Rooms were "to be well swept three times a day" and "the bed linen to be changed every Saturday." There were nine such rules in all, signed by Wm. Miller, Consul General, and followed with the remark, "N.B. 'Cleanliness is next to Godliness.' "[17] It was a far cry from the old location, "in the very hot-bed of almost constant revelry and drunken broils."[18]

Another shift in location was made by the British about 1848, and the newer site occupied for another five or six years. "After some time had elapsed, the General removed the Hospital to a spot on Waikiki Plains, which received the name of Little Britain. The number of inmates not being sufficient to authorize the maintenance of a separate establishment, of late years, British seamen, when sick, have been provided for at the American Hospital, or by private parties, who were liberally paid for nursing and board."[19]

The U. S. Hospital in Honolulu was even more mobile. Originally located in rented quarters in Waikiki, it soon moved to the ewa-mauka [north—ED.] corner of Fort and Hotel Streets.[20] By January 1847 it had been shifted to a site on the ewa [northwest—ED.] side of Alakea Street between Beretania and Hotel.[21] During the mid-1850's it occupied quarters on the corner of Punchbowl and Beretania.[22] At still later date



FIG. 1—The Queen's Hospital from Punchbowl. An early photograph of the Islands' first non-profit voluntary hospital. This building was completed in December, 1860, although the Archives of Hawaii, from whose files the negative was taken, date the picture 1857.

(1866) a Honolulu newspaper wrote: "We understand that the former Jarrett premises, on the plain of Kulaokahua, have been purchased for $1,200, and are being put in repair to be used as the Hospital for American Seamen, the lease of the old premises near Palace Walk having expired.[23] The next site was the Maine Hotel premises on King Street.[24] In 1871 it was back on

[11] The first newspaper allusion to the Lahaina establishment read: "DIED: . . . Also, at U. S. Hospital, Lahaina, . . ., Henry Thompson, age 41 years . . ." (*The Friend,* December 1, 1845). Both hospitals were briefly mentioned in *The Friend* on August 1, 1860 (p. 57), at which time they were apparently still in operation.

[12] And used as a parsonage (*Pacific Commercial Advertiser,* March 18, 1901).

[13] Nettie Hammond Lyman, *History of Haili Church, 1824-1942,* pp. 38-39. There is some evidence of a similar hospital in Hilo at an earlier date.

[14] The last contemporary newspaper reference to "English Hospital, Honolulu" occurred in *The Friend,* December 1, 1845 (p. 182). The rules for Little Greenwich were dated January 1, 1846 (published in *The Friend* August 1, 1846, p. 117).

[15] *The Friend,* August 1, 1860, p. 57.

[16] *The Friend,* July 1, 1844, p. 62f. and January 15, 1847, p. 12.

[17] *The Friend,* August 1, 1846, p. 117.

[18] John Gibson, Surgeon in the Royal Navy, in *The Friend, of Temperance and Seamen,* Honolulu, July 1, 1844, p. 62f.

[19] *The Friend,* August 1, 1860, p. 57.

[20] Map, *The Friend,* October 1, 1845, p. 1.

[21] Map, *The Friend,* January 15, 1847, p. 13.

[22] An advertisement in *The Polynesian,* Honolulu, March 31, 1855, describes the "Honolulu Marine Hospital . . . near the corner of Beretania and Punch Bowl sts." This institution seems to have been the same as the "HOSPITAL, Marine, U.S., corner of Punchbowl and Beretania Streets" referred to in *The Friend* on January 1, 1857, and the " 'U.S.' Hospital" mentioned by *The Friend* on March 1, 1855.

[23] *Hawaiian Gazette,* June 16, 1866.

[24] *Pacific Commercial Advertiser,* March 6, 1869.

Punchbowl Street, near Beretania.[25] It apparently was closed not long thereafter.[26]

What appears to have been the first true civilian general hospital in the Islands, the City Hospital, was opened in Honolulu in 1853. Its owner, Dr. Ford, advertised extensively. As early as October 1853, readers of the Honolulu *Polynesian* were informed:[27]

CITY HOSPITAL

S. PORTER FORD, Physician and Surgeon
Kaahumanu Street, first door below R. Coady & Co.

DR. FORD has taken the commodious building at the North end of King Street, and established a Hospital for the treatment of invalids, residents or strangers. It is conducted upon the plan of similar institutions in the United States, and offers a comfortable home during sickness, with the best of care and at a moderate expense. Patients will also be received by and have the attention of Dr. Hoffmann. Apply at the office in Kaahumanu street, or the Hospital.

☞ Dr. F. has removed his residence to the dwelling occupied by Hon. L. Severance on Union street.

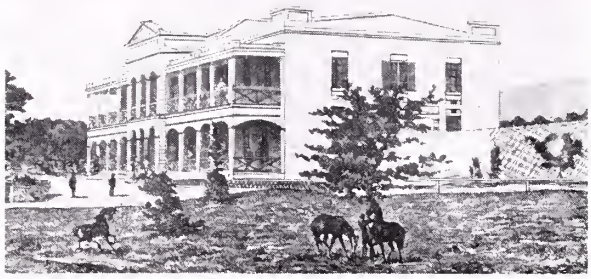


FIG. 2—The Queen's Hospital. The first non-profit voluntary hospital established in the Hawaiian Islands. This sketch was apparently made from a photograph variously dated 1860 and 1881.

A later advertisement announced that Dr. Ford had "leased the 'Gravier Property,' on King street . . . and is now prepared to receive Patients, for Medical or Surgical treatment." The patronage of seamen, travelers and residents was solicited, and prospective patients were informed that they would be "provided (if desired) with Private Rooms, at a moderate expense."[28] This was not, strictly speaking, Dr. Ford's first hospital venture. He and Dr. George A. Lathrop had opened "a Hydrop establishment in Nuuanu Valley, as a private hospital [in May 1852]; they separated after a short while. . ."[29]

There is reason to believe that the competition Dr. Ford stirred up was too much for his City Hospital. Early in 1855 the Honolulu Marine Hospital (also called the "U. S." Hospital) began placing advertisements immediately below those of Dr. Ford's institution. According to these newspaper insertions, the traditional emphasis of the U. S. Hospital on sea-faring patients had vanished. It now offered improved accommodations ("the rooms are large and well ventilated, and fitted up superior to any of the kind hitherto provided in Honolulu") in "the most salubrious and quiet part of the city" (the corner of Beretania and Punchbowl). Four physicians were on hand to greet the patient.[30] Dr. Ford's newspaper notices soon dropped all mention of his City Hospital, and the Marine Hospital appears to have had the field to itself between 1856 and 1859.[31]

Clearly, the Islands needed something more. Disease, poverty and a declining birth rate had reduced the population of Hawaii (then inhabited almost wholly by native Hawaiians) from approximately 300,000 in 1778 to 134,925 in 1823, then still further to 73,138 in 1853.[32] Marine hospitals intended for foreign sailors and small proprietary establishments obviously were not the answer. Adequate facilities, an ample program of care for the medically indigent (a term then applicable to a large proportion of the natives), and extensive health education were needed.

Recognition of these needs became widespread in the 1850's. On May 25, 1855, King Kamehameha IV approved "An Act to Institute Hospitals for the Sick Poor" at Honolulu and Lahaina.[33] The young king approved additional measures of this sort in 1859 and 1860[34] and then tried to interest various other persons in a hospital.

For a long time the necessity of a Public Hospital has been seriously felt in Honolulu. This necessity has been felt by foreigners as well as natives. While Honolulu,

[25] As the "United States Marine Hospital" (*Hawaiian Gazette*, January 4, 1871).

[26] The last published reference that could be found appeared in *The Friend* on December 2, 1871, with reference to the death of sailor there, November 15, 1871. Charles Chillingworth of the noted kamaaina family says that a Dr. Trousseau operated a clinic opposite The Queen's Hospital (i.e., on the last known site of U. S. Hospital) in the 1870's and 1880's.

[27] *The Polynesian*, October 15, 1853. The same 1-column advertisement appeared regularly until December 31, 1854.

[28] *The Polynesian*, Honolulu, February 17, 1855. The same advertisement, in abbreviated form, was still appearing as late as September 22, 1855.

[29] "Early Hawaii Medicos," *Hawaiian Annual for 1933*, p. 57.

[30] Advertisement for Honolulu Marine Hospital in *The Polynesian*, March 31, 1855.

[31] A list of Honolulu's trade and service facilities published in *The Friend*, March 1, 1855, mentioned only two hospitals. "Both the 'City' and 'U.S.' Hospitals are creditable establishments" (p. 17). Dr. Ford continued to advertise his private practice and drug store until late 1859, but omitted all mention of his hospital after September 1855. It probably became defunct not long thereafter. Since the Queen's Hospital did not open until August 1, 1859, it would seem that only the U.S. Hospital remained in Honolulu in the late 1850's.

[32] Data from Romanzo Adams, *Interracial Marriage in Hawaii* (New York, 1937), p. 8.

[33] *Laws of His Majesty Kamehameha IV passed by the Nobles and Representatives at Their Session 1855*, p. 20.

[34] "An Act to Provide Hospitals for the Relief of Hawaiians in the City of Honolulu and other localities," *Session Laws of 1858-9*, p. 435; "An Act in Aid of the Queen's Hospital Association," *Statutes of 1860*.

for more than a quarter of a century, has not been without its hospitals for American and British seamen, still those have not fully met the necessities of the public. While many have felt kindly disposed towards the enterprise, the great cost of erecting and sustaining such establishments has been hitherto an unsuperable obstacle. Even that, it is now confidently hoped, will be overcome. Our youthful King and Queen, taking a favorable view of the subject, have been pleased to take the initiative steps. His Majesty, rightly imagining that no one could more successfully than himself collect funds for this project, with subscription in hand, and accompanied by his private secretary, goes forth among his people. The subscriptions obtained, as now published, are the happy results of this effort of his majesty.

Once determined to build a hospital, the backers of the project proceeded with all possible speed. Even before completion of the fund drive, and almost a year before they could lay the cornerstone of the permanent building, the trustees took steps to open a temporary structure to serve as an interim hospital. In the first biennial report of Queen's Hospital, its physician, Dr. William Hillebrand, reported:

The Queen's Hospital commenced its operations August 1st, 1859. It had been decided by the Board of Trustees, in one of its first meetings, to hire a suitable building for a limited time, in order to open a dispensary forthwith, where indigent sick natives should receive gratuitous advice and remedies, and where also should be received such of them as were severely ill, as house patients, so far as the capabilities of the house would admit.[35]

Pursuant with this resolution, I lost no time, immediately after my appointment to the office of Physician to the Hospital, to take possession of the house hired for the purpose at the foot of King Street, and had it fitted up for a Dispensary and temporary Hospital. In it we remained until March 1860, when we removed to the grounds purchased by the Board of Trustees for the erection of the permanent Hospital, and entered the old wooden building, which we still use as a special ward for female patients. The house accommodations were hence somewhat enlarged, for while the first building had only room for eighteen patients, we could now accommodate twenty-four. In this building we remained until December, when we were enabled to establish ourselves permanently in the fine stone building erected at the foot of Punchbowl hill.[36]

The cornerstone of the Queen's was laid with considerable pomp and panoply. "On Tuesday 17th July [1860], this imposing ceremony was performed by His Majesty the King, in person, according to the ritual of the Masonic Order, of which His Majesty is a P.M."[37] The new building had 124 beds.[38] Thus began the modern period of hospital facilities in Hawaii.[39]

[35] On September 3, 1859, *The Friend* reported :"Over one hundred patients have received medical advice and treatment from the dispensary, and there are averaging ten boarding inmates."

[36] *The Polynesian,* Honolulu, June 29, 1861.

[37] *The Friend,* August 1, 1860.

[38] *The Polynesian,* June 29, 1861.

[39] Later developments are reviewed in the historical section of *Hawaii's Hospitals: Past, Present and Future* (Public Health Committee of the Chamber of Commerce of Honolulu, 1948). This publication also contains a number of tables related to the events described above.

HAWAII MEDICAL SERVICE ASSOCIATION
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REPRESENTATION FOR HAWAII, MAUI, AND KAUAI

HMSA is pleased to announce that the Hawaii, Maui, and Kauai medical societies are now represented on its board of directors. The officers and directors of HMSA are looking forward to a pleasant year of association with Dr. Archie Orenstein of Hilo, Dr. John Sanders of Paia, and Dr. Sam Wallis of Lihue. It is felt that this extension of representation will enable HMSA to provide even greater service to participating doctors residing on the outside islands.

A Non-Profit Association Providing Medical and Hospital Care

Hawaii
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[EDITORIALS]

H.R. 4313—THE BIEMILLER BILL

The "National Health Insurance and Public Health Act" demanded by Mr. Truman has been introduced into the House of Representatives and referred to the Committee on Interstate and Foreign Commerce. It proposes to provide medical and dental care, ward accommodations up to 60 days per year, home nursing service and auxiliary services (laboratory, x-ray, *et cetera*) for all illnesses except tuberculosis, mental disease and industrial accidents, to all persons having an income of over $150 a year, and to the needy through local or national welfare agencies, beginning in June, 1951. It also proposes to subsidize all sorts of medical, dental, and nursing education, medical research, hospital construction, and public health services of all kinds, including "Research in Child Life."

The program is to be financed piecemeal by the usual lighthearted appropriations of $16,000,000 here and $25,000,000 there; the "Personal Health Services Account" is separately financed by a 3 per cent tax on all wages up to $4,800 per year, *plus* "sums equal to the estimated cost of furnishing dental . . . and home-nursing services . . .; and (3) any further sums required."

The program is to be controlled and operated by the Federal Security Administrator (currently, Mr. Oscar Ewing). He will direct and supervise a National Health Insurance Board consisting of the Surgeon General of the United States Public Health Service, the Commissioner for Social Security, and 3 members, at least one of whom is to be a licensed doctor of medicine, appointed for 6-year terms by the President. The NHIB is to be guided from time to time by the 16-member NAMPC, or National Advisory Medical Policy Council, appointed by the Federal Security Administrator (Mr. Ewing again) and functioning under the same chairman as the NHIB. Eight members of this council are to represent beneficiaries of the NHIPHA, and six are to be "outstanding in medical or other professions concerned with the provision of services"—but not necessarily either physicians or dentists.

The NHIB and the NAMPC and the FSA may run the program either directly, or preferably, and "wherever possible," through state (or territorial) organizations established for the purpose in states which have complied with a long series of stipulations contained in the Act. In either event, the states are to establish "local health-service areas" under the direction of either a local administrative committee, or a local administrative officer guided by an advisory committee. These local committees, whether administrative or advisory, are to consist of from 8 to 16 members, a majority of them representing recipients, and the remainder the purveyors, of services. Local professional committees are to be formed to "assist" and "advise" the local administrative and advisory committees.

A beneficiary under the Act "may freely select the physician, dentist, nurse, medical group, hospital, or other person of his choice to render . . . services, and may change such selection." However, only general medical and dental services may be requested directly. "Specialist, home-

nursing, hospital and auxiliary services shall be obtained from the specialist, nurse, hospital or other person of the patient's choice, whenever the practitioner . . . or . . . an administrative medical officer . . . refers him for such services." In emergencies or under special circumstances, referral may be dispensed with by regulation of the National Health Insurance Board.

Physicians and dentists are to select by majority vote, within each health-service area, one of the following methods of remuneration: fee for service according to a fee schedule, per capita payments, whole or part time salary, or combinations and modifications of these. Specialist services may be paid for on the basis of fee for service, per case, per session, per capita, by salary, on "other basis," or some combination of these methods. Groups of practitioners, organizations, partnerships, hospitals and voluntary health-service insurance plans are specifically authorized to be remunerated for services rendered under the terms of the Act. It is stipulated that payments to practitioners "shall be adequate to provide professional and financial incentives to practitioners to advance in their professions and to practice in localities where their services are most needed," to encourage high standards in quality of services, to permit postgraduate study, and to allow for vacations. The size of individual physicians' panels may be limited only on recommendation of the professional committee in any health-service area.

In summary, Mr. Biemiller's version of Mr. Ewing's version of Mr. Falk's version of socialized medicine is no more palatable than any of its predecessors. It subjects doctors to autocratic control by an elaborate bureaucracy of almost wholly non-medical governing bodies. It grossly underestimates costs of operation, and provides no means of meeting costs except reduction of services. It proffers the attractive but unthinkably costly and impractical fee-for-service method of remuneration, which even the erythematous Dr. Boas has openly admitted the government could not possibly afford. It paves the way for the same outrageous increases in medical work and paper work, without proportionate increase in income, that have occurred under the British plan. And finally, it would take us one long and perhaps irretrievable step along the road to the collectivist, socialist, welfare state. It's a very bad bill.

D.A.B.P.M.P.H.

"Diplomate of the American Board of Preventive Medicine and Public Health" is the newest title in America's roster of special medical designations. Sponsored by the A.M.A., the American Public Health Association, the Association of Schools of Public Health, the Canadian Public Health Association, and the Southern Medical Association, and composed of representatives of each of these groups, this new specialty board has just been launched. Until July 1, 1950, practitioners of preventive medicine or public health "who have attained unquestioned eminence" in this field will be accepted without examination as members of the Founders' Group. After that date, all applicants will be examined by written and oral tests, as is the practice of most of the existing specialty boards.

ARCHIVUM CHIRURGICUM NEERLANDICUM
A NEW DUTCH SURGICAL JOURNAL

The medical profession of the Netherlands have made another breach in the language barrier separating nations from one another, by the publication of the first issue of this English-language journal of surgery. Like their excellent abstract journals, the *Excerpta Medica,* this journal accepts contributions in English, Dutch, French or German, and translates them for publication in English.

Their expressed purpose is in part to gain wider interest in their own work, but more importantly to gain for themselves the advantage of international criticism. They hope, too, that they may be able to show some advantage in the relatively slight degree to which surgery has, in Holland, become divided into separate special fields.

Published quarterly, on glossy paper of good quality and with a stiff paper cover, the new journal looks decidedly worth-while. Illustrations are plentiful and excellent, the typography is pleasing and readable, and the material is interesting and instructive. At $8.50 a year, this journal should find wide acceptance among American surgeons. It is to be hoped that it will point the way to further efforts at giving medical journalism a more truly international scope.

THE CHAMBER OF COMMERCE INVITES YOU TO JOIN

The Chamber of Commerce of Honolulu has issued an invitation to all professional men to join its ranks. Let us hope that many doctors will see their way clear to join this organization. There are many reasons why membership in Honolulu's biggest civic organization benefits not only the doctor who joins but the medical profession as well.

The Chamber offers us, as doctors, a chance to gain wider support for the policies we espouse as

members of the medical association. The Chamber can, and does, afford our profession increased protection from ill-conceived social moves.

The Chamber of Commerce, through its highly effective representation in the Territorial legislature's committee rooms, "carried the ball" for doctors in fighting the repugnant compulsory sickness tax bill.

The Chamber now has very few doctor members, although its membership total is 1,850 or so, and there are 285 members of the Honolulu County Medical Society.

The Chamber now depends almost entirely on businessmen for its support, and the business community has been suffering a severe set-back as result of the waterfront shipping strike. This strike has greatly reduced the earnings of many of the business houses which contribute to the Chamber, and it has reduced to a trickle the amount of money coming into the public health fund from the voluntary tonnage levy.

Now, more than ever before, Chamber leaders would appreciate new memberships from the doctors. The Chamber needs the doctor's viewpoint—and his $40 membership fee. And we doctors need the Chamber of Commerce.

LICENSURE OF FOREIGN GRADUATES

Following is an abstract of a report which appeared in the *Journal of the American Medical Association*[1] regarding the licensure of graduates of foreign medical schools. It was prepared by the Committee on Foreign Medical Credentials sponsored by the Council on Medical Education and Hospitals of the American Medical Association.

It is pointed out that two basic principles are involved in the licensure of physicians whether they be graduates of domestic or foreign schools. The first principle is the requirement that a physician satisfy a licensing body (representing the public) as to his competency before he is permitted to practice. The second principle involved is that the training a man has undergone in preparing to enter a profession is of paramount importance in determining the quality of his professional practice. The best assurance of the quality of the training that a physician has received is an intimate knowledge of the faculty, facilities, curriculum and standards of the medical school from which he has graduated.

In licensing graduates of American and Canadian schools, the various state and territorial licensing boards have for many years had the benefit of the findings of periodic surveys of the schools carried out by two accrediting bodies, the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges. The licensing boards have recognized that the evaluation of the school from which a physician graduates is as important as the evaluation of the physician himself.

Unfortunately it has been beyond the resources of the two accrediting agencies mentioned above to maintain current appraisals of the quality of education offered by the three hundred or more medical schools in other parts of the world. For many years this was not important because the number of physicians migrating to the United States was small and most came from medical schools well known in America. From 1930 to 1939, unsettled and unfavorable conditions abroad prompted large numbers of physicians to migrate to this country and at the same time internal developments in some countries led to rapid deterioration in the quality of medical education. This trend was accentuated by the war. The complete exclusion of foreign-trained physicians, however, cannot be reconciled with the traditional role of this country as the land of opportunity. Nevertheless, it is clear that until more information can be obtained about the present quality of medical schools abroad, the licensing boards would fail in their responsibility to the public if they did not use the greatest care and discretion in admitting foreign-trained physicians to their examinations.

It is, therefore, essential that the agencies concerned with this problem make every effort to obtain detailed current knowledge of foreign medical schools. From such study it should be possible to derive a list of schools which have maintained or are now maintaining educational programs sufficiently comparable to the training offered by the medical schools of this country to warrant the admission of their graduates to the examinations of the various state and territorial licensing boards.

The licensing bodies and the governments to which they are responsible have a heavy obligation to continue their efforts to maintain high standards of medical practice. They must also recognize that the spirit and tradition of America places upon them an obligation not to deny the opportunity to practice his profession to any citizen or prospective citizen who can demonstrate satisfactory qualifications as to his professional competence and character.

TERRITORIAL BOARD OF
MEDICAL EXAMINERS

[1] J.A.M.A. 139:1103-1104 (Apr. 16) 1949.

PSYCHIATRIC COMMENT

SOME FACTORS IN CHILDREN'S SCHOOL ADJUSTMENT

MARGARET MOULTON, M.SC. IN SOC. ADMIN.

One of parents' greatest concerns about their children is that they "do well" in school. Particularly is this true in a culture which places high value on education and in a situation where parents, because of lack of opportunity for education themselves, try to realize their ambitions through their children. Unfortunately, this cultural ideal and these personal ambitions are sometimes not realizable in an individual child and trouble results. The boy who has a real flair for mechanics may have neither the capacity nor the desire to be the professional man that his father, seeing a profession as giving real status to the family, may want him to be. Frustration for the boy and his father is the result, a frustration which may have innumerable ramifications as far as the boy's adaptation to life is concerned.

The different kinds of parental worries about their children are numerous. Most obvious are those which involve trouble with the school authorities, truancy or delinquency, or lying and stealing, for example, which cannot be ignored because of the pressure brought to bear on the parents. One cannot overlook the truant officer who turns up on the family door-step time after time. Nor is it easy to ignore recurrent complaints that one's child is hitting the other children over the head or disrupting the classroom. The report card, too, turns up at regular intervals with "marks" which may be a source of concern to the parents. Any one or a combination of things may cause the parent to seek help for his child somewhere, and the family physician is many times the person to whom he looks.

The so-called problems that the child shows are often only symptoms of general maladjustment. Whether or not a particular item of behavior is considered "a problem" depends on the point of view. The aggressive, hyperactive, distractible child who disrupts the classroom may, from the point of view of the teacher, constitute a serious "problem." In contrast, the conforming, reticent, serious child who at no time calls attention to himself may, by virtue of these characteristics, be an easy child to deal with but from the point of view of a trained observer may be potentially a more seriously disturbed individual than his troublesome classmate. Parents vary a great deal in what they see as cause for concern, depending on their own background, school experience and attitudes toward themselves, their fellow man and the world in general. The "problems" or symptoms are important, however. Though they may not be the main issue they are often the first recognized sign that all is not well. Early recognition of maladjustment, and help given before the trouble continues and becomes intensified can mean a more hopeful prognosis. Take as an example a boy in the seventh grade who has not learned to read. By that time all of his school work suffers. He cannot comprehend his social studies, and his whole academic performance is affected. At the same time he begins to feel inferior because he cannot keep up with the group and more and more feels reluctant to join the others on the playground. He becomes a "lone wolf." It is not difficult to see the potential hazards in his getting along with people, not to mention the handicap in getting a job to maintain himself. Had his reading disability been diagnosed and help given early this later social and academic maladjustment might have been avoided.

Parents' concern, then, about their children's problems in school, is not something to be taken lightly, though the concern may be colored by their own biases and exaggerated beyond what the real situation calls for. Over-exaggerated concern itself poses problems for the child and may increase his difficulties in adjustment. Teachers, too, on occasion, may be unduly anxious. The pressure of dealing with a schoolroom full of active youngsters day after day may preclude a dispassionate evaluation of an individual child's difficult behavior. Many times someone outside the immediate situation is the only one to weigh carefully the important facts.

A number of symptoms are easily recognized by anyone who works with children. The previously mentioned delinquent and aggressive behavior, by the mere fact of its being forced upon one's attention, is most readily recognized. Other trouble signs are: too much conformity, day-

dreaming, fearfulness, shyness, crying and whining. Still further are tics, mannerisms such as nail-biting, wetting, excessive masturbation, stuttering, baby-talk and complaints of headaches and ill health. Unless many of these items happen to be a source of irritation to those dealing with the child, they may be overlooked.

Recognition of the trouble must come first, but dealing with the problem directly, i.e., treating the symptom without diagnosing and correcting the cause of the trouble, is futile and a waste of time. For example, two children of the same age and in the same grade may be showing the same kind of difficult behavior, inattention and distracting the other children in class, let us say. One child may be bright, alert and from a home where he is secure and loved. Examination may show that the work of the grade has no stimulation for him because he already knows that and more, too. The other child may be just a little on the slow side and from a home where he is rejected or at a disadvantage with his brothers and sisters. The bright child gets into mischief because he is bored and hasn't enough to do. The slow child may be finding the work too hard and may be needing some attention so badly that he will use any means to get it. Obviously, the inattention and distracting of others are quite different propositions with each child and what is done to improve matters must vary with each child.

To make an evaluation one must first be able to decide how serious a deviation from the "normal" the trouble is. The age of the child is important because what is classifiable as a "problem" at one age may be quite suitable behavior at another age. It is, therefore, important to decide whether or not a real "problem" exists. Knowledge of children's development and what can be expected at any given age is necessary. With this knowledge parents and teachers can be helped to see that sometimes no real "problem" exists and that given time a child can be expected to change in the natural course of events.

Human behavior is complex and the outgrowth of many factors. Since school performance is one small segment of human behavior, understanding and explaining it requires the examination and evaluation of a number of factors. One is observing a biological unit reacting to an environment. One needs to examine both carefully. Thinking, then, in terms of a child in school, knowledge of his physical status is important, i.e., his health, and any handicapping factors such as visual, auditory or other defects.

The child's intelligence is an important factor. If a child is unable to perform satisfactorily in the grade where he is placed he may be so frustrated that he is predisposed to trouble. The character that this assumes will depend on other factors in his life—his relationships at home, his attitude toward himself and so on. This frustration, on occasion, is the "last straw"—just that much additional burden that he cannot carry. If that last pressure is eased he can go along in fairly reasonable fashion.

His emotional stability, maturity and attitudes will play a large part in his general performance. If he is upset and disturbed he may not be able to use the intelligence he has. Here, the environment he lives in is of importance because his attitudes and emotional responses are closely related not only to his current environment but also to the environment that has gone before.

Examination of the current environment should include evaluation of the situation in the classroom itself. Suppose he has an "uncooperative attitude." Perhaps the teacher, herself, has contributed to this by an unbending, rigid enforcement of discipline for discipline's sake. Perhaps she doesn't like the particular child and is not interested in him as a human being. Perhaps her own personal problems are so pressing that she has little energy left to work with the children helpfully. It is neither sensible nor reasonable to require a child to adapt to an unreasonable environment.

Home environment, too, plays a major role in determining a child's performance in school. If the home is forever in a state of emotional upheaval the child may arrive at school in such an upset state that even though he has good intelligence he cannot use it. Sources of emotional upset in the home are so numerous that they cannot all be even enumerated here. Just a few that have obvious implications will be mentioned. Parents disagreeing with each other may use the child as their field of battle; he is torn between conflicting loyalties. Another child may be obviously preferred. The parents' handling of the child may be based on their own neurotic, infantile needs rather than what the child, himself, needs. Getting a child to do something may be on the basis of the adult's wanting his own way, and a battle of wits ensues. Perhaps the parent has never permitted the child to learn to do things for himself. Perhaps the child has had little attention except what he has been able to force through extreme measures. Perhaps there have been inconsistent demands made upon him. If a child has lived all his life in this kind of environment, small wonder if his behavior at school is perverse.

Parents cannot be blamed for this state of affairs any more than one can condemn a sick man for his illness or a psychoneurotic for his neurosis. Examining the parents' background history almost invariably shows a similar kind of disturbed emotional situation extended into adulthood. Parents frequently fail to realize, themselves, what is causing the trouble. There will be as much variation in the parents' attitudes about the problems as there is variation in the problems themselves. Some parents evade responsibility in the matter by projecting all the blame outside themselves—on the child, on the school, on the neighbors' children and what not. Others take a very self-condemning attitude; some quite frankly admit having arrived at an impasse and want help. One has to be able to read between the lines many times and study what the parents have done. Their statements, though honest, may be so thoroughly colored by their own emotional biases that they cannot be taken at face value.

Even when the cause of the difficulty is very obvious to the observer, a point-blank statement about it may only threaten the parents or make them resentful; so, defining the basic problem and altering their attitudes and behavior may require judicious consultation over a period of time.

A child's adjustment to school is important. It is a large part of his early life and the place where he first tries his wings outside his immediate family. If the school is the kind of setting which one can reasonably expect a child to adapt to and he isn't quite making the grade but is, rather, showing danger signals then it is time to make an appraisal of what is happening in his life experience. Help should be given with his present adjustment to increase the likelihood of reasonable adaptation when he reaches maturity.

Summary

(1) Poor school adjustment is many times the first recognized symptom of a child's general maladjustment.

(2) Study of the child himself, his physical, mental and emotional status as well as his past and present environment is needed to determine the causes of the maladjustment.

(3) Improving his school adjustment can come only through the treatment of the causes of the difficulty.

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MEDICAL NEWS

Dihydroergocornine, or DHO 180, a dehydrogenated ergot alkaloid, is under intensive study for possible use in hypertension. It is related to DHE 45, which is the less toxic and more effective substitute for ergotamine tartrate in the treatment of migraine.

Dihydroergocornine has no effect on blood pressure in normal individuals, but hypertensives are highly sensitive to its action: a prolonged fall in blood pressure occurs after it is given either orally or parenterally. The fall in blood pressure is usually accompanied by a fall in heart rate, in contrast to the tachycardia usually produced by tetraethylammonium chloride (Etamon), and there is none of the postural hypotension so common after Etamon.

Although DHO 180 is a true sympathicolytic agent, and should cause peripheral vasodilatation, this occurs rarely. It is postulated that the fall in blood pressure is due to vasodilatation in the splanchnic vascular bed. Thus this drug mimics exactly the effects of surgical sympathectomy.

In contrast to Etamon, which blocks the autonomic ganglia, DHO 180 is thought to act centrally, either in the medulla or hypothalamus. A single injection of DHO 180 produces a fall in blood pressure for several hours and sometimes for as long as two days. More recent trials have involved the use of this drug suspended in oil for prolonged action. The side effects, tiredness and blocking of the nose, are inconsequential. (Goetz, R. H., *Lancet,* March 26, 1949.)

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A single dose of 100 mgs. of dicumarol by mouth is suggested as a test of liver function. If the prothrombin time falls to less than 60% of normal, liver disease is present. Such a fall occurred in 28 of 100 patients so tested at Bellevue Hospital. Of these, 26 patients (93%) had liver disease or congestive heart failure or both. (Reisner, et al., *Am. J. Med. Sci.,* April, 1949.)

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Needle biopsy of the liver would be done much more often if it were not for the serious risk of hemorrhage. An ingenious refinement of technique which abolishes this risk consists of the injection of 1 cc. of topical thrombin through the biopsy needle after the tissue has been removed. A firm clot is instantly formed and no bleeding occurs. This technique has been used in over 200 cases and none of the patients experienced any untoward symptoms. This is in contrast to the mortality of 0.67% in 1,200 cases collected from the literature. (Friedrich and Polizzer, *The Lancet,* March 26, 1949.)

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The first successful use of subcutaneously implanted pellets of insulin has been reported. Doses of from 2,000 to 16,000 units of insulin have been implanted subcutaneously in the form of pellets composed of protamine zinc insulin and cholesterol. About 1% of the amount implanted is released daily. A single implantation controls diabetes for about 80 to 100 days. The initial report described the successful use of insulin pellets in a severe juvenile diabetic who required 180 units of insulin a day, and also in an obese diabetic woman with gangrene of one foot. The advantages of this method of administering insulin are the elimination of daily injections, avoidance of adipose dystrophy from the injections and, thirdly, the implant continuously gives out insulin at a uniform rate during each twenty-four hour period, thus imitating an artificial endocrine pancreas. No hypoglycemic reactions due to accelerated absorption were encountered.

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A recent study indicates that mongolism occurs in a remarkably high percentage of the babies born to women who are near the age of the menopause (12.5% of babies born to women 45 - 47 years of age) (Benda, C. E., *J.A.M.A.* 139:979, April 9, 1949). With the rising incidence of late marriages this problem is growing. A ray of hope in this gloomy picture is supplied by the news that glutamic acid favorably influences mongolism.

The basic deficiency in mongoloid children is that they learn at a very much slower rate than normal children, so that instead of increasing their mental age by six months for each six calendar months as a normal child does, a mongol will mature mentally only three months, or less. The administration of glutamic acid by some unknown mechanism increases the learning ability of mongoloid children so that they mature at a nearly normal rate. This has resulted in actual raising of the IQ in some instances, but still not enough to raise these patients out of the moron class. These results, nonetheless, are encouraging. (Zimmerman, et al., *Arch. Neurol.* and *Psych.,* March, 1949).

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Chlor-Trimeton Maleate is a halogenated maleic acid salt of Trimeton, a currently popular antihistaminic. This new derivative is effective in doses of 2 to 4 mg., as compared to the usual dosage of 25 to 100 mg. for the older antihistaminics. Its low toxicity gives Chlor-Trimeton a therapeutic index (lethal dose: effective dose) of 2500. An amphetamine-like action has been discovered in preliminary trials, and it is planned to study the drug in mental depressive states and in extrapyramidal disorders (Parkinsonism, etc.). (Ref: Research Circular, Schering Corp.)

* * *

Diparcol is another in the parade of new drugs for the treatment of Parkinsonism. Like Benadryl and Tolserol, this new synthetic amine overcomes Parkinsonian rigidity but does not alleviate tremor or salivary drooling. For control of the latter, belladonna alkaloids are used concomitantly. Moderate improvement was obtained in eight patients in whom this drug was tried, without any undesirable side effects. A tendency toward leukopenia occurs in most patients during the first month in which the drug is used. (Duff, R.S., *Brit. Med. J.,* April 9, 1949.)

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For the rare diabetic who is allergic to all the usual forms of insulin the use of recrystallized insulin is recommended by Jorpes of Stockholm. (Jorpes, J. E., *Arch. Int. Med.,* April, 1949.) Although most patients who

are allergic to insulin can be successfully managed by switching from one brand of insulin to another, or from protamine to globin or crystalline insulin, and still others can be managed with the use of antihistaminic drugs, there are still a few with painful local reactions and generalized allergic manifestations in whom the use of recrystallized insulin might be advisable. For such use the insulin is recrystallized from four to seven times, thus removing traces of protein impurities which are responsible for allergic reactions. Recrystallized insulin is at present available only from the Vitrum firm, Stockholm, Sweden.

Anti-histamine ointments have been found effective in preventing skin damage from X-ray irradiation. Benadryl and pyribenzamine, 5 per cent in aquaphor have been found to have excellent protective qualities. Since skin damage is the most important factor which limits the size of the dose of X-ray which can be given to underlying structures, any agent which protects the skin from irradiation damage should permit the use of larger doses of X-ray. (Mains, M.P., *Radiology,* April, 1949.)

Vonecidin has passed its clinical trials with flying colors. It is composed of vonedrine, a safe and non-irritating nasal decongestant and modified gramicidin (methylol gramicidin.) The third ingredient, Ceepryn chloride, is a detergent which, by its wetting action, increases the spreading and penetration of the solution in all the crevices of the nasal cavity. Advantages of this new combination are lack of irritation, the powerful antibiotic effect, and effective decongestion of the nasal mucosa without blanching and rebound. (Davis, L.C., *Laryngoscope,* March, 1949.)

Three papers were presented at the Twenty-Second Scientific Session of the American Heart Association (June 3 and 4, 1949) on Thiomerin, the new mercurial diuretic which is effective when given subcutaneously. This mercurial compound has only about 1/160 the cardiotoxicity of the usual mercurial diuretics and produces no local irritation or necrosis when injected into subcutaneous tissues. This is highly important in patients with massive edema, and in those who have had multiple venipunctures in whom the intravenous route has become impossible. At the same meeting, Sussman and Stein reported that Mercuhydrin is also safe for subcutaneous injections. Over one thousand trials with this route of injection have been conducted without a single serious side reaction. Advantages of the subcutaneous route are that the patient or his relatives may give the injections, which may sometimes be necessary at frequent intervals, and secondly, since fatal reactions following mercurial diuretics occur only after intravenous administration, complete elimination of fatalities should result if only the subcutaneous route is employed. Subcutaneous Thiomerin seems to be just as effective as intravenous Mercuhydrin or Mercupurin, but it seems to have a slower and more prolonged action which would seem to be an advantage in that it would avoid the rapid depletion following other mercurials which sometimes produces nausea and muscular cramps.

The large quantities of the surgeons' valuable time and epidermis which are frittered away in the conventional surgical scrub may be saved in the near future if the results of a recent experiment at the University of Michigan are borne out in practice. Cultures and animal inoculations were made with the washings from the hands of eleven surgeons who for one period used the conventional scrub for ten minutes using two brushes, and for a second period used only a three-minute wash with bar soap containing hexachlorophene. Comparative effectiveness of the two methods was studied on the ordinary bacteria which usually inhabit the skin and on virulent cultures of Streptococci which were poured over the hands before the scrub and the washings. The tests conclusively showed that a three-minute wash with hexachlorophene soap is vastly superior to the usual ten-minute surgical scrub using two brushes. (Nungester and others, *Surg., Gynec. & Obst.,* May, 1949.)

Nitrogen mustard may prove to be useful not only in blood dyscrasias but also in the management of terminal carcinomatosis. Karnofsky and others report the use of HN2, in 35 patients with inoperable carcinoma of the lung. In 74 per cent of the patients, some clinical improvement occurred, such as diminution in cough, dyspnea, hemoptysis, pain and weakness, and relief of obstruction of the superior vena cava. Objective regression of pulmonary metastatic lesions and absorption of pleural adhesions was observed. Improvement lasted for two weeks to two months. In one patient with recurrent pleural effusion caused by extension to the pleura the intrapleural injection of HN2 prevented further fluid formation. Brief clinical improvement was also seen in 18 other patients with a miscellaneous variety of tumors. (Karnofsky and others, *Cancer,* Nov., 1948.)

Calciferol (vitamin D2) and Dihydrotachysterol (parathormone) have a beneficial effect on sarcoidosis. The drugs have been used alone and in combination in the treatment of both cutaneous and visceral sarcoidosis with good results. From 100,000 to 300,000 units of vitamin D2 are given daily and the dosage for parathormone varies from .625 mg. to 3.75 mg., daily. The rationale of this treatment is based on the fact that epithelioid cells occur as a response to phospholipids. Both Calciferol and Dihydrotachysterol cause excess excretion of phosphorus and may possibly cause a breakdown of phospholipids in the sarcoid lesion. The results of treatment in 17 cases were good but the incidence of toxic reactions was high. (Curtis and Grekin, *Trans. Amer. Acad. Ophth. & Otolaryng.,* March-April, 1949.)

C. A. Domzalski, Jr., M.D.

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Flynn, J. E., ed. *Blood clotting and allied problems.* 1948. (gift of Josiah Macy Foundation)

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Nursing

American Dietetic Association *A manual for teaching dietetics to student nurses.* c1949. (gift of publisher)

Barrett, Jean *Ward management and teaching.* c1949. (from Nurses' Association)

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Chayer, M. E. *Nursing in modern society.* c1947. (from Nurses' Association)

Committee on the function of nursing *A program for the nursing profession.* c1948. (from Nurses' Association)

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National League of Nursing Education *A curriculum guide for schools of nursing.* 1st ed. rev. c1937. (from Nurses' Association)

National League of Nursing Education *Fundamentals of administration for schools of nursing.* c1940. (from Nurses' Association)

Olson, L. M. *Improvised equipment.* 4th ed. c1947. (from Nurses' Association)

Pfefferkorn, Blanche *Administrative cost analysis for nursing service and nursing education.* c1940. (from Nurses' Association)

Shepard, Katharine *Textbook of attendant or practical nursing.* 3rd ed. c1948. (from Nurses' Association)

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Psychiatry

Abramson, H. A. *Psychodynamics and the allergic patient.* c1948. (gift of publisher)

Bernheim, H. *Suggestive therapeutics.* 2nd rev. ed. c1880.

Lowrey, L. G., ed. *Orthopsychiatry, 1923–1948.* c1948.

Public Health

Anderson, G. W. *Communicable disease control.* 2nd ed. c1948. (from Nurses' Association)

Cooper, L. F. *Nutrition in health and disease.* 10th ed. rev. c1947. (from Nurses' Association)

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Gillett, L. H. *Nutrition in public health.* c1947. (from Nurses' Association)

Grout, R. E. *Health teaching in schools.* c1948. (from Nurses' Association)

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Surgery

Alexander, E. L. *Operating room technique.* 2nd ed. c1949. (gift of publisher)

Gabriel, W. B. *The principles and practice of rectal surgery.* 4th ed. 1948.

Thyroid

Crile, George *Diagnosis and treatment of diseases of thyroid gland.* c1932.

Crile, George, Jr. *Practical aspects of thyroid disease.* c1949. (gift of publisher)

Miscellaneous

Buckstein, Jacob *The digestive tract in roentgenology.* c1948. (gift of publisher)

Christian, H. A. *Bright's disease.* c1948.

Jensen, Frode *Medical care of the discharged hospital patient.* c1944. (from Nurses' Association)

Jones, J. M. ed. *Physicians' desk reference.* 1949. (gift of publisher)

Lee, Mabel *Fundamentals of body mechanics and conditioning.* c1949. (gift of publisher)

Luck, J. M., ed. *Annual review of physiology.* v. 11. 1949.

Quarterly cumulative index medicus. v. 42. July-Dec. 1947.

Reifenstein, E. C., ed. *Conference on metabolic aspects of convalescence.* 16th and 17th, 1947-48. (gift of Josiah Macy Foundation)

Riley, G. M. *Essentials of gynecologic endocrinology.* c1948. (gift of publisher)

Ruesch, Jurgen *Duodenal ulcer.* c1948. (gift of publisher)

Sadler, S. S. *Rheumatic fever.* c1949. (gift of publisher)
Senn, M. J. E., ed. *Problems of early infancy.* 1948. (gift of Josiah Macy Foundation)
World Health Organization *Manual of the international statistical classification of diseases, injuries, and causes of death.* v. 1. 1948. (gift of Board of Health)

The Library received several books and a collection of autographs of famous French doctors from the Merci Train through the courtesy of Dr. Halford, and Dr. Mermod was kind enough to write personal letters of acknowledgment in French to the various donors.

The following books were received:

Binet, Leon *Nouveux aspects de la lutte contre la mort.* 1945.
Charry, Rene *Chirurgie moderne de la hanche.* c1948.
Delarbre, Leon *Dora, Auschwitz, Buchenwald.* c1945.
Delhoume, Leon *Dupuytren.* 3rd ed. 1935.
Lecoq, Violette *Temoignages.* c1948.
Marnot, Rene G. *Dix-huit mois au bagne de Buchenwald.* 1945.
Mériel, P. *Cardiologie du medecin praticien.* 1948.
Thoillier, Henri *L'hopital Francais.* 2me ed. c1947.
Vallery-Radot, Pasteur *Les plus belles pages de Pasteur.* c1943.
Vallery-Radot, Pasteur *Pasteur.* c1947.

The Library is most grateful for this contribution to our collection of foreign medical literature.

Dr. Ralph B. Cloward is the author of an article entitled "Abscess of Brain Due to Clostridium Perfringens Treated with Penicillin" which was published in the *Archives of Neurology and Psychiatry,* November 1948.

BOOK REVIEWS

Duodenal Ulcer: A Sociopsychological Study of Naval Enlisted Personnel and Civilians. By Jurgen Ruesch, M.D. Pp. 118. Price $4.00. University of California Press, Berkeley, 1948.

Dr. Ruesch and his collaborators have produced a very readable book on a very important subject which is only recently coming to the forefront. This book is a psychiatrist's view of the etiology of duodenal ulcer in terms of personality study. The line of approach is very much in keeping with the present trend toward a psychosomatic aspect in medicine today.

The contents of this book are better described by its subtitle, "A Sociopsychological Study of Naval Enlisted Personnel and Civilians." Basically, this deals with stresses and strains of individuals who have gone through a war period in the navy or in civilian employment. The group presented is the one in which the environmental and emotional situation has led to the development of duodenal ulcer. Many psychiatric data, in terms of charts and tables of the material presented, are given.

This book is unique in that it brings together the psychiatrist and the internist or gastroenterologist in a very important, special, single problem in internal medicine. Certainly, anyone in these fields who has to handle and manage patients with duodenal ulcers should consider Dr. Ruesch's book a "must" for their reading. We, as physicians, are going to have to realize that there is much more in the treatment of duodenal ulcer than merely the control of hyperacidity, hypermotility and diet, if we are going to successfully manage this ever increasing duodenal ulcer problem. This book does much to bring out this other angle of the basic personality pattern of the individual which, while it requires a little more time and effort on the part of the examiner, nevertheless is fully as important as all of the laboratory, x-ray and physical examinations put together.

L. Clagett Beck, M.D.

Principles of Psychiatric Nursing. By Madelene Elliott Ingram, R.N. New 3rd Edition. Pp. 525 with 44 figures. Price $3.75. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1949.

The importance of this book in nursing literature is due largely to the fact that it is based entirely on nursing situations. The old type textbook organized according to disease entities was confusing and repetitious. The organization into units of nursing care places the emphasis where it should be: on the patient.

This book is complete in the legal aspects of psychiatric nursing, it is up to date in the uses of biblio-therapy and music-therapy. It covers every type of situation in psychiatric nursing. Its arrangement is logical. There is emphasis placed on the socio-economic factors of mental disease.

This book should be of great value in the educating of the nurse beyond the immediate care of the patient to become a leader in the campaign for a healthy society.

Tokie Matsunobu, R.N.

Fundamentals of Pulmonary Tuberculosis. Sponsored by the American College of Chest Physicians. Edited by Edward W. Hayes, M.D. Pp. 480, 182 illustrations, 72 figures. 2 full page 4-color plates. Price $9.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This book, sponsored by the American College of Chest Physicians, is written by 27 American contributors, all well-recognized men in the field of tuberculosis. Here the reader will find the best thoughts available on our present knowledge of this disease which still remains one of our most serious medical and health problems. The fundamentals pertaining to the cause, diagnosis, prevention and treatment of pulmonary tuberculosis have been made available in well-arranged, concise, short chapters, which despite their brevity are amazingly complete and up-to-date. The busy practitioner will heartily welcome the concentrated, accurate information presented in this book. Likewise the student and teacher will here find a source-book of knowledge with pertinent bibliography to serve as a guide to the voluminous literature accumulated on the disease.

In the introduction it is modestly stated that "it is not intended that this book should supplant the books already published on tuberculosis." It is the opinion of the reviewer that because of its clarity, brevity and completeness, this volume is a "must read" book for any student, teacher or physician interested in this common disease.

Homer M. Izumi, M.D.

Psychodynamics and the Allergic Patient, by Harold A. Abramson, M.D., F.A.C.A. Pp. 81. Bruce Publishing Co., St. Paul, Minn., 1948.

This small volume is the full panel discussion held during the Third Annual Meeting of the American College of Allergists, and represents the views of specialists from several related medical fields on the psychodynamics of the allergic patient. This relationship has been recognized for many years but very little has been accomplished in bringing men of related fields to develop a closer correlation of the laws of their specialities in the therapy of the allergic. Here then for the first time are concrete views of allergist, psychiatrist and biophysicist in an attempt to lay the groundwork for future thinking. The modern education of physicians, that is the academic training, has for almost a century centered about the infectious diseases. This is perfectly logical with the development of our basic medical sciences, but the time has come to evaluate the individuals who make up the large percentage of practice—the chronic patients, and their relationship to society. Medicine has a real liaison with the social sciences because the practitioner who deals with these problems is also dealing with social problems of the individual in his relationship to his family and his social groups.

This volume is an excellent beginning to what will undoubtedly lead to further exchange of ideas between scientists of related medical fields. As the editor so aptly states "I hope that this first step in the coordination of organizational allergy and psychodynamics will

lead to the ultimate recognition of the importance of emotional factors in the routine therapy of allergic patients by both allergist and the general practitioner."

TELL NELSON, M.D.

Rheumatic Fever, Nursing Care in Pictures, by Sabra S. Sadler, R.N., B.S. Pp. 151, 204 illustrations. Price $3.50. J. B. Lippincott Company, Philadelphia, 1949.

At a time when this community is going forward in the care of the rheumatic fever child, this book is a godsend.

Mrs. Sadler gives the home nursing care of a rheumatic fever patient from his first visit to the physician through the convalescent period and his return to a normal mode of living. This book, primarily directed to parents of rheumatic fever patients, stresses that it should be used as a guide only, and that the home nursing care is always based on the attending physician's specific orders for the individual patient.

The author has integrated the mental, emotional, social, and spiritual aspects with the physical aspect of the long term care of a rheumatic fever patient. She points out members of community agencies who may contribute to the patient's welfare such as the public health nurse, the medical social worker, the school teacher, the occupational therapist, and the nutritionist.

There are 204 illustrations which clarify nursing procedures taught in the home. Many helpful suggestions for methods of improvising equipment to facilitate nursing care are given. Mrs. Sadler's explanations of terms such as electrocardiograph, fluoroscope, and bedrest are invaluable in interpreting the objectives of diagnostic tests, treatments and nursing care to patient and family.

The content of this book could be utilized as a guide for patient-parent teaching on the hospital ward, in the outpatient clinic, and in the home. In Hawaii, the physical setup of the home and the dietary components will vary tremendously due to the varied racial make up of our population; the nurse will therefore need to make adaptations in her teaching to fit our local needs.

If parents were encouraged to read this book, it might help to allay some of the fears they encounter when they are told that their child has rheumatic fever.

HISAKO YOSHIDA, R.N.

The Surgical Clinics of North America, Chicago Number, Symposium on Orthopedic Surgery. Pp. 304. W. B. Saunders Company, Philadelphia, Pa., 1949.

Twenty-one orthopedic surgeons, three general and two neurosurgeons have collaborated to produce a Chicago Symposium on Orthopedic Surgery. Each article must be considered as representing its author's conclusions, personal in some and collected in others, on the subject assigned to him. These articles are not the consensus of a group as might be gained in a round-table and moderator discussion. A variety of a more common orthopedic conditions are discussed, some in great detail and some only by mention.

In reading such a symposium, one would hope to get what is considered today's best opinion on diagnosis and treatment. Also, it should be possible for the reader to disagree with the author's plans and conclusions. The reader would also like to turn to some of the author's sources which are mentioned; however, in one-third of the articles no bibliography is present making the checking of the author's conclusion difficult and time consuming. If the conclusions are personal, one is satisfied to omit the references; however, if the data is collected the original author should receive credit by references at the end of each article. Complaint is justified when an author illustrates, for example, the course of treatment by neglect in a case of Perthes Disease. That the individual case secured an end result that is satisfactory might give the casual reader of the article a totally erroneous impression. Many examples can be cited to show exactly an opposite and disastrous result under the same so-called treatment by neglect. In so well a prepared article on "Surgical Care of Arthritis" the persistent use of the word "chylectomy" (not in the dictionary) for "chilectomy" is inexcusable. In the choice of the authors more care might have been taken to secure those whose interest and experience in the particular topic would be extensive and specific and not casual. For example, in the paper of radio-humeral bursitis, the author claims to have never seen in the operating room an unquestionable well defined radio-humeral bursae with endothelial lining and fluid lying between the capsule of the elbow joint over the head of the radius and over-lining the extensor tendon of the wrist and fingers. These are examples where better choice of topics for the author and by the author might have been made.

Interpolation where indicated by the Senior Consulting Editor might be interesting in cases of differences of opinion. It is felt that readers, not familiar with the subjects here collected in this symposium, should by all means study the articles presented and referred to the references and also read similar subjects for other opinions before initiating treatment. In general, illustrations are excellent and well described. Several of the articles on producing better functioning joints of fingers, toes, hip and elbow are well worth reading. For some doubting patients several illustrations would quickly change their minds.

JOHN W. COOPER, M.D.

Nursing Care of Neurosurgical Patients, by Roland M. Klemme, M.D., F.I.C.S., F.A.C.S. Pp. 142, 62 figures, 1 plate in full color. Price $3.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This book gives a fair reveiew of neuro-anatomy, concise and helpful to the student. The chapter on clinical signs and symptoms is perhaps the most valuable to the student.

The chief objection to this book is the importance placed on operating room procedures, which occupy more than half the book. This is of course important but certainly out of place in a textbook of nursing care. There is, in truth, very little nursing care discussed in the entire book. It follows the lines of too many textbooks written by doctors—an outline of what a specific doctor wants for the care of his patient.

Nursing needs textbooks based on principles of care, rather than one physician's applications of principles.

LUELLA KUNKLE, R.N.

Operating Room Technique, by Edythe Louise Alexander, R.N., Second Edition. Pp. 765, 668 illustrations. C. V. Mosby Company, St. Louis, 1949.

To keep pace with the many recent advances in surgical techniques and procedures, Edythe Louise Alexander has thought it advisable to revise her text on Operating Room Technique.

That there has been much material to add is evidenced by the more complete discussion of the various phases of aseptic technique and of recent developments in the

preparation and sterilization of supplies. Included in the revision are descriptions of operative procedures perfected in recent years as well as information and illustrations of operations not found in the first edition. The procedures, which are described in a detailed manner, include basic set-ups, as well as the use and care of instruments. Miss Alexander advocates no one superior plan of technique but has presented basic principles of asepsis which once mastered can be easily adapted to any situation which may occur.

This book furnishes an excellent guide and reference and should prove of immeasurable value in any surgical department or nursing school library.

SADIE CHING, R.N.

Current Therapy 1949—Latest Approved Methods of Treatment for the Practicing Physician, by Howard F. Conn, M.D. Pp. 672. Price $10.00. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1949.

Although not a handbook in size, this volume is a handbook in scope and presents, succinctly, schemata of treatment for most of the common diseases commonly encountered in usual office practice. It differs from the usual book on treatment in that it is perhaps more dogmatic, and different viewpoints are not presented where there may be controversial opinion. Neither are there any appended bibliographies. However, these factors enhance, rather than detract from, the value of the book, as the busy practitioner would refer to a volume such as this for instant information and would not have to wade through paragraphs of interesting but ponderous opinions. The treatments outlined are tried and tested and those which are generally accepted by recognized specialists. No space is wasted on vague generalities which a medical writer might safely assume are well known to the reader. It is a pleasure to read that in the treatment of the uncomplicated cold one should "Never give sulfonamides or penicillin in any form" and that the "increase of caloric output by drugs is not only ultimately unsuccessful but so contraindicated as to be firmly condemned." A word of caution seems to be in order in considering this book: one must always remember that proper treatment must be predicated on a correct diagnosis. Once a correct diagnosis has been established, the practitioner may then readily refer to this volume.

ALVIN V. MAJOSKA, M.D.

Textbook of Obstetrics and Obstetric Nursing. By Mae M. Bookmiller, R.N., and George Loveridge Bowen, A.B., M.D. Pp. 737. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1949.

The outstanding trend throughout the book is its modernization. This is portrayed by the emphasis placed on the social, emotional, and economic factors, which are essential in the training of the student nurse today. These factors are incorporated in the material throughout the book and not set aside in separate chapters, thereby furnishing a more complete and more profound picture of nursing care.

The book appears to be complete in every aspect. It starts with the history of obstetrics and obstetrical nursing and follows through in consecutive sequence every concern which applies to the study of obstetrics and ends with the care of the infant in the home.

The glossary is exceptionally useful, as it contains elementary words which are necessary in the student nurse's vocabulary and also the more technical words applicable for further education and review for the graduate. Test questions of a very comprehensive nature are found at the end of each chapter with the answers located in the section immediately following the glossary. In addition, problems of typical specific situations are scattered through the chapters. The book is liberally furnished with clear informative pictures, diagrams and sketches, a valuable asset to the nurse, as it brings the text more clearly to the mind.

The many outstanding features of the book make it an invaluable text for the student and graduate nurse.

SARA JANE TRAINOVICH, R.N.

The Digestive Tract in Roentgenology, by Jacob Buckstein, M.D. Pp. 889, 1030 illustrations, 659 figures. Price $16.00. J. B. Lippincott Co., Philadelphia, Pa., 1948.

This is a detailed and comprehensive text on the various phases of the digestive tract in roentgenology by a physician who is both a practicing and consulting roentgenologist of the alimentary tract, and also and primarily a practicing gastroenterologist.

There are over 1000 illustrations in this lengthy book of 889 pages, most of them showing good roentgenographic and reproducible detail.

There are presented some of the technical procedures of the various examinations to help the physician, other than a radiologist who may have to do these examinations. The book opens with a history of roentgenology of the alimentary tract, which is interesting in many aspects. There are numerous case histories corresponding to the reproductions illustrating all of the aspects of these various lesions.

It is an excellent book for general review of the pathology of the alimentary tract but will, of course, not supply the experience and detailed training necessary for the proper examination of the alimentary tract, which should be done by roentgenologists or gastroenterologists trained in roentgenology.

PETER J. WASHKO, M.D.

Textbook of Attendant or Practical Nursing, Third edition. Former edition known as Textbook of Attendant Nursing by Shepard and Lawrence. Pp. 506, 51 illustrations. Price $4.25. The Macmillan Company, New York, 1948.

This is a basic textbook for use in schools training practical nurses and for use by practical nurses for reference.

This edition presents several improvements over the former one. It has been made more readable by enlarging the print and using 100 more pages for approximately the same amount of material. Sections and chapters have been rearranged so as to appear in a more logical sequence.

The section on dietetics and nutrition has been completely rewritten to include newer information and a chapter has been added on the care of the well child. Other sections have been brought up to date by rewriting certain paragraphs.

Although this book has been much improved and is probably the most complete and best balanced of the practical nursing texts available, it has one outstanding weakness. There is too much information with too little explanation in each paragraph. Practical nursing students with their limited educational background find it difficult to grasp the important points.

MARJORIE ANN ELLIOTT, R.N.

Handbook of Materia Medica Toxicology and Pharmacology. By Forrest Ramon Davison, B.A., M.Sc., Ph.D., M.B. 4th Edition. Pp. 730, 35 illustrations. Price $8.50. C. V. Mosby Company, St. Louis, Mo., 1949.

This rather small volume embracing a collection of data on several subjects is small largely because no words are wasted, no conversation indulged in. It is almost solid fact, and as up to date as any bound book on a living subject can hope to be.

The technical aspects of drug actions are well and lucidly presented and the clinical application of drugs given in adequate detail.

The section on Toxicology is perhaps a little brief on the action of poisons, but succinct and admirable on the treatment of poisoning.

I ordered a copy for myself.

H. L. Arnold, Sr., M.D.

Medical Clinics of North America. Nationwide Number, Treatment of Long-Term Illness. Pp. 293-606. Price $18.00 a year. W. B. Saunders Company, Philadelphia, Pa., 1949.

The current issue of the Clinics is devoted to a symposium on treatment of chronic diseases and care of the aged. The topics covered are hypertension, tuberculosis, heart disease in the aged, hepatic insufficiency, thyrotoxicosis, diabetes, chronic lymphomas and leukemias, the anemic states and several others. The papers are largely summaries of current therapy and recent advances in the fields covered. In general, the articles are well written and packed with good solid information. They are not comprehensive, however. Perhaps the best paper is the one by Dr. Alvarez on the constitutionally inadequate. The book is good reading and recommended for all who want a digest of current thought in the chronic diseases and care of the aged.

John L. Bell, M.D.

Ward Administration and Clinical Teaching. By Florence Meda Gipe, M.S., R.N. and Gladys Sellew, Ph.D., R.N. Pp. 350 with 20 illustrations. Price $4.25. The C. V. Mosby Company, St. Louis, 1949.

This book seems to have been designed for both teachers and administrators and especially for those having dual function. It would be especially useful for the clinical instructor new in this area of teaching because of the background of the philosophy and the clear outline of methods commonly used. The example of a lesson plan used in clinical teaching clearly outlines the teacher's and the student's objectives and the main points to be covered. It emphasizes the preparation of both the student and the teacher.

Great emphasis is placed on the integration of biological and social sciences with nursing arts, through concrete examples. Suggestions of the methods of evaluating the student's nursing practice are helpful.

The emphasis is on the educative function of the ward administrator though there is very good discussion of the various activities of ward administration. The weakest point of the book seemed to be in the chapter on staff education. This was an incomplete discussion offering very little in new ideas in organization or context.

Kay Yafuso, R.N.

American Dietetic Association: A Manual for Teaching Dietetics to Student Nurses, by Professional Education Committee. Consultants: The National League of Nursing Education. Pp. 487 with 6 figures; 5 diagrams. Price $4.25. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1949.

I feel this book will prove to be a valuable aid to teaching dietetics, particularly for the inexperienced teacher or one who does not have much teacher training.

This manual covers nutrition, food preparation and diet therapy. Basic facts are given and they are paralleled by concrete suggestions for bringing the student into the discussion or drawing on her fund of information to illustrate pertinent points. Suggested references for both the students and instructor are given at the end of each unit. The manual seems quite complete, covering the material generally included in standard textbooks on dietetics for nurses. The unit on food preparation especially seems to go beyond the texts.

The nutrition is planned for a minimum of 18 hours, the food preparation or laboratory for 20 hours. The section on diet therapy is to be fitted into 14 or 15 hours and could be used to supplement the course as it is now taught.

Virginia Cooksey, R.N.

Fundamentals of Body Mechanics and Conditioning--An Illustrated Teaching Manual by Mabel Lee, B.S., LL.D., and Miriam M. Wagner, B.A., M.A. Pp. 377 with 70 figures. Price $4.50. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1949.

"Fundamentals of Body Mechanics" seems to be written principally for the physical education director in secondary schools, though it might be used as a reference book for a personal hygiene course in a school of nursing.

There are over one hundred pages of this book devoted to exercise, discussing it from the standpoint of prevention and care of such conditions as dysmenorrhea, sacroiliac strains, poor posture. The material for this book is well organized and well illustrated. It provides lesson plans, teaching techniques and evaluation tests which would be of great assistance in organizing courses in personal hygiene or body mechanics.

Carrol Moyer, R.P.T.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 283rd regular meeting of the Hawaii County Medical Society was held at the Hilo Country Club on April 23, 1949; this meeting was a dinner meeting in honor of Dr. L. L. Sexton who is retiring from active practice after devoting 40 years to the practice of medicine in Hawaii. The business meeting was first conducted and called to order at 7:15 p.m. by the newly elected president, Dr. George Y. Tomoguchi.

Dr. H. Sexton's motion to amend the Constitution and By-Laws to provide for honorary memberships and to permit a waiver of the initiation fee upon the readmission of members who resign to pursue further studies or because of illness was seconded by Dr. S. Haraguchi and voted on unanimously by the members present. The president appointed a Constitution committee to study the matter and act accordingly.

Dr. Leslie presented his views on special assessments and stated that he objected to the method of spending of funds of the Territorial Medical Association; he read a report which stated that public relations in the field of medicine makes the private patients more amendable to paying their bills and that inasmuch as he has no private practice, he was not interested in this objective. He stated that he had been notified by the American College of Chest Physicians of which he is a member that it was not necessary for him to pay such assessments in order to continue being a member of this particular organization. When he re-joined this Society last year, he did so with the understanding that he would not be required to pay any special assessments. Dr. Harold Sexton informed him that there had been a misunderstanding all the way round and that at a meeting of the Public Policy and Grievance Committee, it had been recommended that Dr. Leslie be given an opportunity to present his viewpoints on special assessments and that should he refuse to pay assessments voted upon by the membership, a secret vote be taken at a subsequent meeting to decide whether or not to retain his membership. Dr. H. Crawford stated that fundamentally, there are basic changes going about in the practice of medicine; that Dr. Leslie's ideas, should they be proven better than those approved at present, should and would be approved by the Society; that medical societies should be conservative and not act too hastily. In this, he felt that the membership of Dr. Leslie in the Society was important. Dr. Leslie stated definitely that he is NOT in favor of any form of compulsory medicine but that at present, organized medicine had offered nothing in place of it. It was then moved by Dr. A. Orenstein and seconded by Dr. H. Crawford and unanimously voted upon by the members present that a special meeting be held; that this meeting be deferred until September when Dr. Leslie returns from the Mainland, and that this meeting decide the disposition of his case.

Dr. W. Seymour, one of the two delegates of this Society to the Territorial Medical Association, felt that cases such as those of Dr. Leslie may possibly be taken care of by the Territorial Association. Dr. S. Kasamoto felt that the problem should be handled by local societies since action by the Territorial Association may set a precedent and make necessary other decisions in like matters where provisions of the Constitution and By-Laws may not be carried out to the letter. Dr. Leslie stated at this time that some societies have handled this problem by electing the doctor in question an honorary member but that he was definitely opposed to this. On the motion of Dr. A. Orenstein which was seconded by Dr. H. Yuen, it was voted upon unanimously by those present that the Delegates be instructed to take this matter up at the Territorial Medical meeting.

There being no further business, the business portion of the meeting was adjourned at 8:05 p.m. After this, Dr. H. Yuen presided at the dinner meeting and as an expression of the gratitude of the Society, presented Dr. Sexton a handsome travelling case. Drs. Crawford, Orenstein and Carter spoke in behalf of and eulogized the past services of Dr. L. L. Sexton.

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The 284th regular meeting of the Hawaii County Medical Society was held at the Hilo Hotel on May 13, 1949. Dinner was served at 7:00 p.m. and the business meeting was called to order at 7:55 p.m. by the president, Dr. George Y. Tomoguchi.

Dr. George Pack was the speaker for the evening. Dr. Laurence Wiig, Dr. Walter B. Quisenberry and Dr. John H. Schaeffer were also present.

Two amendments to the Constitution and By-Laws of this Society were discussed and voted upon. These amendments had been read in open session at the Society meeting on April 23, 1949 and copies had been sent to all members of the Society 16 days prior to this meeting. Amendment number 1 read as follows: There is hereby created the position of honorary membership in the Hawaii County Medical Society. Individuals eligible for this position shall be: any physician who has retired from the active practice of medicine in the community or any physician who leaves the community after having engaged in the active practice of medicine and who has been deemed worthy of this honor by virtue of his conspicuous service. It was moved by Dr. S. Haraguchi, seconded by Dr. C. Phillips, and unanimously approved by the members present.

Amendment number 2 read as follows: A waiver of the initiation fee shall be permitted for this cause: Upon readmission of any member who resigns to pursue further studies for a period of more than eight months or because of illness of more than eight months. It was moved by Dr. C. Phillips, seconded by Dr. S. Haraguchi, and unanimously approved by the members present.

Dr. Pack conducted a panel discussion on various types and aspects of cancer. He especially urged a survey to consist of G-I X-rays of 1,000 Japanese persons to determine the incidence of gastric Ca and the possible etiology of the high incidence of gastric Ca in this racial group. He stated that Federal funds may possibly be available for this purpose. He also urged making cancer cases reportable as is the case in some states including Connecticut, Rhode Island and New York state excluding New York City.

A special meeting of the Hawaii County Medical Society was held at the Hilo Yacht Club on Friday evening, May 20, 1949. This meeting was devoted exclusively to a talk by Dr. Hale Shirley, Associate Professor of Pediatrics and Psychiatry at Stanford University School of Medicine.

Dr. Shirley spoke on "The Emotional Development of the Child" and then later conducted a panel discussion among the members present.

ROBERT M. MIYAMOTO, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The first regular meeting of the Society for the new fiscal year was held June 3 in the Mabel Smyth Auditorium. Dr. Arnold, Jr., presided; 39 members were present. Dr. Walter Quisenberry discussed "Potentialities of Congenital Syphilis" and presented several cases. Dr. Samuel Allison's presentation, "Pimples and the Practitioner," was postponed at his request because the business session had taken so much time.

Dr. Alvin Majoska discussed the new law relating to coroner's autopsies and answered questions regarding it.

The Society voted unanimously to cooperate with the Hawaii Chapter of the National Society for Crippled Children and Adults in putting on an institute on rehabilitation on August 8 and 9, to be conducted by Dr. Harry Kessler, the President of the International Society for the Welfare of Cripples, and Commander Thomas Canty, Director of Physical Rehabilitation at Mare Island, California. Dr. Dodge will be in charge of the program for the Society.

The following amendments to the By-Laws were passed by unanimous vote:

1. Chapter V, Section 4 (Nominating Committee): (The last sentence to read as follows): "It shall prepare a list of nominations for all elective offices in the Society and the nominations shall be circulated to the general membership at least seven days before the annual meeting."

2. Chapter I, Section 2b 4 (Interne Membership): (To add the following): "Interne membership shall terminate when the member is no longer in interne or resident service."

3. Chapter VI, Section 1 (Initiation Fee): (To read): "There shall be no initiation fee."

The following amendment was adopted after some discussion for action at the next regular meeting of the Society:

"The annual dues of service members shall be $37.50 and of interne members shall be $5.00 a year or fraction thereof. Such members shall not be subject to assessments."

A motion that the Society approve the formation of a national bureau or agency to sell or broker, for the benefit of voluntary medical care plans, the services of several different plans, was carried by a vote of 22 to 9.

A resolution relating to the current ILWU waterfront strike was presented, modified, and adopted by unanimous vote, as follows:

WHEREAS, industrial disputes which cut off shipping to Hawaii interfere with the importation of essential foodstuffs and medical supplies, and

WHEREAS, such disputes thereby endanger the health of many persons, a very small proportion of whom are directly involved in such disputes, now therefore be it

RESOLVED, that the Honolulu County Medical Society urges that measures be taken to permit prompt resumption of shipments of food and medical supplies into Hawaii and to guarantee against future interruption of such shipments.

JOHN WM. DEVEREUX, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was called to order by President Masunaga at the library of the Wilcox Memorial Hospital on April 13.

Dr. Nils P. Larsen spoke on "Old Hawaiian Medicine."

* * *

The regular monthly meeting of the Kauai County Medical Society was held on May 11, in the library of the Wilcox Memorial Hospital. Dr. Masunaga called the meeting to order at 7:30 P.M.

The meeting was entirely given over to a discussion of tumors by Dr. George Pack of the Memorial Hospital in New York City.

JAMES R. MASON, M.D.
Secretary

TERRITORIAL MEDICAL ASSOCIATION REPORTS

MINUTES OF SPECIAL COUNCIL MEETING

May 27, 1949, at 7:30 p.m.
Mabel Smyth Building

Present: Dr. Crawford presiding; Drs. Tilden, Chung-Hoon, Pinkerton and Orenstein (Hawaii).

Minutes: The minutes of the Council meeting of May 5 were read and approved.

Heart Association: The Chairman reported that he had had a verbal request for the appointment of an Advisory Committee for the Hawaii Heart Association, though no official request has been received.

ACTION: Dr. Pinkerton moved that on receipt of a written request from the Hawaii Heart Association, the President should proceed to appoint such a committee. The motion was seconded by Dr. Tilden and passed unanimously.

Fee Schedule: The Chairman stated that there has been a fee schedule committee of the Territorial Medical Association for several years. The revised fee schedule presented by that committee has not been adopted. The Honolulu County Medical Society has taken over the function of drawing up a new fee schedule. Under the present circumstances, he wondered whether a new territorial fee schedule committee should be appointed. It was agreed that any fee schedule committee appointed would have to have the support of the majority of the territorial membership. Under present conditions that appears to be impossible.

ACTION: Dr. Orenstein moved that for the time being the President should not appoint a territorial fee schedule committee unless a need for it arises. The motion was seconded by Dr. Chung-Hoon and passed unanimously.

Committees: The Council was informed that the President had reappointed the chairmen of the other committees and had asked the chairmen to name the doctors whom they would like to serve on their committees.

Woman's Auxiliary: Dr. Crawford said that just recently the Territorial Woman's Auxiliary has been requesting Mrs. Bennett to do secretarial work.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Tilden, it was unanimously agreed that the Woman's Auxiliary and its advisory committee should be informed in writing that the Council of the Territorial Medical Association recognizes the importance of the Woman's Auxiliary and wishes to do everything in its power to promote the aims and purposes of the Auxiliary. In recognition of its importance, the Medical Association desires to cooperate with it in every way and will assist in the secretarial work so far as the facilities of the executive staff permit. However the work of the executive staff in the interests of the Territorial Medical Association should come ahead of all accessory activities. The decision must necessarily rest with the executive staff as to when and how they may carry out these duties.

Executive Secretary: It was brought out by the President and other members of the Council that various members of the Association who are not officers of the Association are discussing matters with the office staff to such an extent as to very seriously interfere with the efficient operation of the office. It was definitely stated by the Council that Mrs. Bennett is employed to deal with the officers and the chairmen of committees. If anyone does not like the way things are handled, criticisms may be addressed by letter to the secretary or the president. The officers welcome criticism of any of their actions and will receive it courteously.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Chung-Hoon, it was unanimously agreed that a letter should be transmitted to the County Societies outlining the duties and responsibilities of the Executive Staff. Following the last annual meeting of the Honolulu County Society in April, Mrs. Bennett's connection with that society was severed and she is now Executive Secretary of the Hawaii Territorial Medical Association exclusively, and Managing Editor of the HAWAII MEDICAL JOURNAL. She may give information as it may be needed, but she is not expected to discuss the affairs of the Association with individual members, all actions taken being the responsibility of the officers. If the members wish to discuss such affairs, they are to do so with the officers of the Association, preferably in writing. The Council of the Hawaii Territorial Medical Association would like to go on record that it has implicit confidence in the executive secretary and her assistant.

Public Service Committee: Dr. Crawford said that in appointing the new Territorial public service committee he had consulted all factions in the Association and so far as possible had selected members acceptable to everyone.

Dr. Pinkerton brought up the fact that the House of Delegates voted that "the delegates be sent to one meeting and the alternate to the Interim meeting and that $800 be paid for each man for the year out of the public relations fund." He stated that it is not within the province of the House of Delegates to designate who shall go to each meeting. That is the prerogative of the delegate.

Dr. Tilden presented a letter from Dr. Arnold, Jr., President of the Honolulu County Medical Society, objecting to the May 25 referendum ballot and the letter accompanying it on the grounds (1) that the vote approving the budget of the public service committee was not unanimous, since Dr. Gotshalk abstained from voting, as he later pointed out; and (2) that the letter suggested there was "whole-hearted approval of the budget and the program" on the part of all the Delegates.

At a meeting of the new Territorial public service committee held this afternoon, the committee requested that a new referendum be submitted to the members of the Territorial Medical Association with a covering letter, because they cannot function properly as long as there is any question regarding their support by the membership.

ACTION: Dr. Orenstein moved that the referendum and letter of explanation, as sent out to the membership May 25, be deemed as unintentionally giving a biased view and be therefore withdrawn. The motion was seconded by Dr. Tilden and passed unanimously.

A new ballot and accompanying letter were dictated by the Council.

ACTION: On motion of Dr. Tilden, seconded by Dr. Chung-Hoon, it was agreed to submit to the members of the Territorial Medical Association a new referendum with the letter approved by the Council.

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MINUTES OF COUNCIL MEETING

June 23, 1949 at 7:15 p.m.
Mabel Smyth Building

Present: Dr. Crawford presiding; Drs. Tilden, F. J. Pinkerton, Orenstein (Hawaii) and Wade (Kauai).

Minutes: The minutes of the May 27 Council meeting were approved as circulated.

Finances: The treasurer's report was read and accepted. There is a balance of $14,662.65 in the treasury.

Annual Meeting Attendance: It was reported that only members of the Territorial Medical Association were permitted to attend the sessions of the last annual meeting. There was some criticism because psychologists, social workers and others had wanted to hear some of the papers. It was agreed that, pending further study, scientific sessions of the annual meeting would be open to members of allied professions upon compliance with the registration requirements.

Woman's Auxiliary: Mrs. Bennett said that the office force could make addressograph stencils for the members of the Woman's Auxiliary when not too busy.

ACTION: Dr. Orenstein moved that the Territorial Medical Association pay for addressograph stencils for the Woman's Auxiliary mailing list. The motion was seconded by Dr. Pinkerton and passed.

The Council agreed it would be in order for the Woman's Auxiliary to assist the public service committee with large mailings or similar tasks upon request by the committee and with the consent of the Advisors to the Auxiliary.

Public Relations Fund: It was reported that the Territorial Dental Society has decided not to continue its joint program with the Medical Association in the public relations field, although we have not yet been notified in writing. The Council authorized the Secretary to write to the dentists concerning the disposition of the balance of the fund and asking for a written confirmation of their decision. Copies of this correspondence will be sent to Dr. Giles.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Wade, the Council authorized the officers of this Association to transfer the remainder of the Medical-Dental Public Relations fund to a new account for the public service committee of the Hawaii Territorial Medical Association and to draw up an agreement providing for withdrawals from the fund upon authorization by the chairman of the Committee.

Mrs. Bennett reminded the Council that on January 5, 1948 they had increased her salary by an additional $100 per month to be paid from the Public Relations fund in consideration of her services for that program. Because the fund is now so depleted and the members of the Association have voted against a new assessment at this time, Mrs. Bennett volunteered to relinquish her $100 a month from the fund in order that additional help might be hired as needed. She would still render all assistance possible to the new public service committee. The Council regretted the necessity for such a step.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Tilden, the Council accepted, for the time being, Mrs. Bennett's offer to relinquish the $100 a month which she has been receiving from the Public Relations fund, in order that such sums may be used to procure extra assistance for the Territorial public service committee when necessary.

Mabel Smyth Rental: Dr. Tilden had received a letter from the Board of Management of the Mabel Smyth Building stating that the rental charged the Territorial Medical Association has been increased from $60 to $85 per month, effective July 1, 1949. The use of the building by the Territorial Association is confined to its office, plus a very occasional committee meeting held elsewhere in the building, plus the annual meeting of the membership once a year. At the time of annual meeting, we pay the building half of the income from commercial exhibits. The Honolulu County Society pays the same amount of rent and is being asked for the same increase. Yet their rent covers their office space, plus the library, plus the stacks, plus the auditorium for their monthly meetings, plus monthly Board of Governors meetings and frequent committee meetings, plus the use of the building regularly by the Academy of General Practice, the Surgical Society, the Obstetrical Society, the Psychiatric Society, etc.

The Council agreed that it did not seem fair to expect the Territorial Association to pay $85 per month for its very limited use of the building compared to the far greater space and use received by the Honolulu Society for the same amount. The Council authorized Dr. Tilden to bring this problem before our representatives on the Mabel Smyth Board of Management and before the Honolulu Board of Governors and make whatever adjustment appears to be fair.

Resolutions: The Territorial public service committee has recommended that the Council take action to have each county society adopt a resolution disapproving the proposed National Health Act introduced by Biemiller as H.R. 4313.

ACTION: Dr. Tilden moved that the county societies be urged to adopt a resolution disapproving the Biemiller bill H.R. 4313. The motion was seconded and passed.

The report of the Hoover Commission was discussed. Although there is danger of Ewing being appointed Secretary of Welfare, its acceptance was considered the lesser of the two evils.

A.M.A. Convention: Dr. Pinkerton and Dr. Hartwell reported informally to the Council on the 1949 A.M.A. Convention which they attended this month. They both stressed the importance of these annual meetings and the fact that one man could not cover them alone. It was agreed that Dr. Pinkerton should give an oral report at the Honolulu County Medical Society meeting on July 8. The Council directed that a written report from the delegate and alternate should be mimeographed and mailed to all members of the Territorial Association at the Association's expense, hiring such extra help as may be necessary.

President's Visits: Dr. Crawford said that he plans to visit each of the county societies in the very near future, rather than wait till later in the year.

I. L. TILDEN, M.D.
Secretary

NOTES AND NEWS

PERSONALS

DR. WILLIAM H. STEVENS has opened an office for the practice of psychiatry in the Capitol Bldg., Waikiki. A native of Denver, Colorado, Dr. Stevens completed a four-year research and teaching fellowship at the University of Wisconsin Medical School, receiving an M.S. Degree in 1939 and an M.D. Degree in February, 1943. After a year's experience as a pilot with the RAF and the USAAF, and an internship at the AAF Regional Hospital, Tampa, Florida in 1944, he worked at the AAF Convalescent Hospital, St. Petersburg, Florida as a resident psychiatrist for the duration of his 39 month Army service. Following separation from the service in 1946 he completed an additional year's residency at the Denver General Hospital and then served for a year on the staff of the Glenwood Clinic in Colorado. For the past year and a half he has been a staff psychiatrist at the Territorial Hospital, from which position he resigned in May, 1949.

DR. C. J. KUSUNOKI, of Honolulu, has returned from attending the meetings of American Academies of Ophthalmology and of Otolaryngology held in New York City, in May. While on the mainland Dr. Kusunoki was certified by the American Board of Otolaryngology as a Diplomate of this Board .

DR. RICHARD C. DURANT, of Honolulu was recently honored by being elected president of the Waikiki Lions Club. Our congratulations to "Dick" on this honor.

DR. ROGERS L. HILL has returned to Honolulu after a three months mainland trip, during which time he completed the examinations of the American Board of Surgery and has been certified by them as a Diplomate. Dr. Hill attended a number of medical meetings on the mainland, as well as visited his former home in Alabama.

DR. FRANK HATLELID, of Waialua, has returned from a three months mainland trip, during which he studied at various clinics, including Duke University, in North Carolina. He visited his former home in Grand Forks, North Dakota.

DR. G. M. VAN POOLE recently completed 50 years of practice of medicine. This is a feat scarcely equaled in the Hawaiian islands. The JOURNAL congratulates Dr. Van Poole on his many years of service to the residents of Hawaii and wishes him continued success in his "second 50 years."

DR. PAUL WIIG, formerly of Honolulu, has returned and opened his office for the practice of obstetrics and gynecology in the Alexander Young Building. Dr. Wiig has practiced his specialty in Reno, Nevada, for several years since his honorable discharge from the Army Medical Corps, which he entered December 7, 1941. He is a Fellow of the American College of Surgeons and of the International College of Surgeons.

The Kuakini Hospital announces that DR. SHELDON CHOLST has left to begin a residency in psychiatry at the King's County Hospital, New York.

DR. DUKE CHO CHOY, of Honolulu, recently returned from Chicago to enter practice in pediatrics. He graduated from the University of Michigan Medical School in 1943. He then served his internship and two terms as resident in pediatrics at the University of Chicago Clinics. In January 1946, he was called to active duty with the Army Medical Corps and served for two years in hospitals in Maryland and Honolulu. He was honorably discharged as a captain in 1948, then returned to the University of Chicago Clinics, where he served as resident and instructor for fifteen months. He is a Diplomate of the American Board of Pediatrics.

The Queen's Hospital announces the following additions to its interne and resident staff: Assistant Medical Residents are DR. GORDON FOO HIN LIU, a graduate of Jefferson Medical College, Philadelphia, Pennsylvania, in 1948; DR. KAY KUNIO OTA, a graduate of Kansas Medical School, Kansas City, Kansas, in 1948, who interned at Presbyterian Hospital, Denver, Colorado; and DR. GEORGE BENJAMIN GARIS, a graduate of University of Virginia Medical School, Charlottesville, Virginia, in 1945, following which he had one year of internal medicine at Los Angeles County Hospital.

The following are the new internes at The Queen's Hospital: DR. FRANCIS TAI CHUNG AU, a graduate of Jefferson Medical College, in 1949; DR. ETTA WRIGHT BEST, a graduate of University of Louisville School of Medicine, in 1949; DR. RICHARD MONTGOMERY FENNO, a graduate of University of Wisconsin School of Medicine, Madison, Wisconsin, in 1949; DR. WILLIAM FINLEY FRY, JR., a graduate of University of Cincinnati School of Medicine, Cincinnati, Ohio, in 1949; DR. SYLVIA SIMPSON HAVEN, a graduate of Hahnemann Medical College, Philadelphia, Pennsylvania, in 1949; DR. ELISABETH MADGE KEHRER, a graduate of University of Louisville School of Medicine, Louisville, Kentucky, in 1949; DR. JESSE IROL KNOX, a graduate of Baylor University School of Medicine, Houston, Texas, in 1949; DR. EARLE JOSEPH MEULI, a graduate of University of Wisconsin Medical School, Madison, Wisconsin, in 1949; DR. JAMES EDWARD MITCHELL, a graduate of John Hopkins Medical School, Baltimore, Maryland, in 1949.

DR. AND MRS. WILLIAM G. BALDWIN are the parents of a baby girl born in March—10 days after they left Honolulu. Dr. Baldwin is at present practicing in Greenville, Plumas County, California.

The Children's Hospital has added three new resident assistants in pediatrics. They are DR. MARION HANLON, a graduate of Northwestern University School of Medicine; DR. CAROLINE WONG, a graduate of University of Santo Tomas in Manila; and DR. KAMEICHI TAKENAKA, formerly of Wahiawa and a graduate of Washington University School of Medicine.

Maui

DR. WILLIAM M. ALLEN, who has been a physician at Hana, Maui, has left to take up medical missionary work in the Belgian Congo.

Molokai

DR. RAYMOND T. EKLUND has left Hawaii to take up the practice of medicine at Placentia, California. Dr. Eklund has been a physician at the Shingle Memorial Hospital, and government physician of leeward and West Molokai since 1945. His numerous friends in the islands will miss him and wish him best of luck in his new location. He will be succeeded by DR. J. I. F "FRED" REPPUN, now physician at the Libby Plantation and Maunaloa, Molokai.

Hawaii

DR. LEO BERNSTEIN, the past secretary of the Hawaii County Society and the present head of the Board of Health in Hawaii, is the President-elect of the Rotary Club in Hilo and will take over the presidency on July 1, 1949.

DR. PETE OKUMOTO recently opened his office for the general practice of medicine and surgery on April 8, 1949.

DR. ERNEST B. CUNNINGHAM left his position at Olaa Hospital on May 1 to take over the position of physician at Pahala Hospital.

DR. EDWARD F. SLATEN, the former physician at Pahala Hospital, is now in Honolulu as an associate of DR. THOMAS FUJIWARA.

Doctors have also been recipients of surgical care. DR. M. H. CHANG underwent a cholecystectomy in Honolulu in March and it seems there were enough calculi to form a veritable rock-garden. DR. CLYDE PHILLIPS had a right anterior ethmoidectomy performed in Hilo on June 4. The former is already back at work, while the latter is convalescing.

DR. BILL BERGIN, former physician at Pepeekeo Hospital, is now associated with DR. ARCHIE ORENSTEIN in Hilo, with offices in the building previously occupied by DRS. SEXTON. Drs. Bergin and Orenstein took over their present premises on May 1; DR. L. L. SEXTON has retired from the active practice of medicine while DR. HAROLD SEXTON is now an associate of The Clinic in Honolulu, in the Department of Pediatrics.

DR. AND MRS. RICHARD YAMANOHA are the parents of a son, William Richard, born on May 9; DR. AND MRS. LEABERT FERNANDEZ of Laupahoehoe are the parents of a son, Tracy Eugene, born May 23.

NEWS

Air Force Medical Reserve Is Established

General Hoyt S. Vandenberg, Chief of Staff, U. S. Air Force, announced May 25 that applications are being received for commissions in the newly created Air Force Medical Reserve. Physicians, dentists, nurses, and other medical personnel who served with the Army Air Forces during the war may make application through the Air Adjutant General, U. S. Air Force, in Washington.

Health Officers Needed

Positions of county health officers for the counties of Kauai and Maui became available July 1, 1949 have not been filled as we go to press. Details are available on application to Dr. C. L. Wilbar, Jr. of Board of Health.

Medical Photography

Mrs. Flora Wheelwright, R.N., formerly a public health nurse in Honolulu and until 1946 a nursing instructor and supervisor at St. Francis Hospital, and a graduate of the Eastman endorsed School of Medical Photography at Rochester General Hospital in New York, is prepared to do medical photography of patients or pathologic specimens. She can be reached at 66171.

Reports of Medical Examinations for Veterans Administration Rating Agencies

The National Rehabilitation Commission of The American Legion wishes to call to the attention of the medical profession that many veterans who are attempting to get disability claims adjudicated before Veterans Administration rating agencies are experiencing delays and handicaps in accomplishment of final rating because of physicians' reports and statements which are unsatisfactory or not acceptable to the Veterans Administration for one reason or another. The purpose of this statement is to clarify what the Veterans Administration desires of physicians' reports to adjudicate claims properly. The Veterans Administration regulations require that the physician's statement be notarized only in initial establishment of service connection for a specific disease or condition. While this requirement is considered a waste of time by most physicians, it is a Veterans Administration requirement in establishing initial service connection. However, most doctors will be examining and working on reports for veterans who have already had service connection established, and are conducting the examination to determine whether the condition has improved, regressed or remained stationary. In such cases, the statement on the physician's letter head is sufficient. Notarization is not required in these cases.

Since claims may be made months, or, in some cases, years after the physician has examined or treated the veteran for a given condition, the doctor should state in the body of his report whether the information is from his office or clinic records, or from memory. Since Veterans Administration adjudication personnel have among their number physicians, or they can obtain the advice of Veterans Administration doctors, the reports should be in professional language with no attempt to simplify the terminology for lay interpretation. Interpretation of the validity of the doctor's data in relation to the veteran's claim will be made by medical personnel. Therefore the reports should be as complete and detailed as possible.

In the report, the date of first treatment and the length of time the veteran has been observed by the doctor should be included. Details of the pertinent history and physical examination are essential. The detailed medical findings, both physical and laboratory, should be included. For instance, degree of extension or flexion of an ankle may be very important in determining adjudication results. Such detailed medical findings should be listed by the reporting physician. When this is done, the final diagnosis made by the doctor can be interpreted in the light of the data that led to the making of the diagnosis. It is not sufficient merely to state that the veteran was treated for a given condition, without giving some of the pertinent facts relative to the condition in the particular veteran. If laboratory tests or roentgenologic or other special examinations are done, reports of these should be included, if such reports are available. Some of these data may be valuable to aid the Veterans Administration in establishing the merit of a veteran's claim.

In summary, the medical report for the veteran for adjudication purposes should be complete and as detailed as possible. History, physical examination, laboratory and special examinations, with dates of period of observation and performance of examinations, are desired. Only with such complete reports can justice to the claim of the veteran be done by the Veterans Administration adjudication agencies.

Cytologic Laboratory in Operation

Now in operation in the Territory, for the first time, is a laboratory established for the cytologic diagnosis of cancer by the smear technique. The laboratory is located at Hawaii Cancer Society headquarters in Honolulu, and will serve the entire Territory. The medical laboratory technician manning the laboratory studied the cytologic method and its various applications under Dr. Herbert F. Trout at the University of California School of Medicine on a scholarship provided by the Hawaii Cancer Society.

The cytologic method, as it is being applied locally, follows these steps:

1. The private physician secures the specimen from his patient.
2. The physician sends the specimen to the cytologic laboratory.
3. The specimen is mounted on a slide, fixed, stained and screened in the laboratory.
4. If the specimen is found to be "suspicious," it is re-screened by a board of cytologists.
5. A report of the findings is made directly to the physician.

Complete instructions for securing and fixing specimens, and for the mailing technique to be employed by physicians on other islands, are being distributed to all physicians in the Territory.

American College of Surgeons

The Clinical Congress of the American College of Surgeons, always international in scope, will be exceptionally world-wide in character when it convenes in Chicago from October 17 to 23 because it will include the Sixth Inter-American Congress of Surgery, and because many delegates from the 13th Congress of the International Society of Surgery, which meets in New Orleans the previous week, are planning to attend the Chicago Congresses, according to Dr. Irvin Abell of Louisville, Chairman of the Board of Regents. Delegates and visitors to the Sixth Inter-American Congress of Surgery will attend the sessions of the Clinical Congress from October 17 to 21, and will hold their own separate sessions on October 21, 22 and 23. Through the membership of the American College of Surgeons in the Association of Inter-American Congresses of Surgery, every Fellow, Dr. Abell states, is a member of the latter group and is entitled to attend its scientific and social sessions. Headquarters for both Congresses will be at The Stevens.

Additional Benefits Provided by Army for Medical Officers

Medical and dental officers will be given priority of consideration in assignment of quarters and their families will be allowed to accompany them on overseas tours of foreign duty, the Department of Army has announced.

The policy is the latest step in a continuing campaign designed to relieve the critical shortage of medical and dental officers in the Army by making their careers and living conditions more attractive. Previous action in this direction includes: provision for an extra $100 per month in pay for medical and dental officers, giving them every opportunity to pursue their specialties, assigning ranks on the basis of civilian accomplishment, and emphasizing stability of their assignments by making only an essential minimum number of transfers of these officers.

CORRESPONDENCE

To the Editor:

We were interested in reading the editorial in the January-February issue of the HAWAII MEDICAL JOURNAL, saying that the Children's Bureau recently established Clearinghouse for Research in Child Life either is an unnecessary Government frill or, if needed, "it is too bad the people who needed it couldn't have established it and financed it themselves."

This is the first comment of this nature we have seen. On the contrary the Clearinghouse came into existence because of persistent requests from a great many research workers for help in keeping abreast with current research. These workers turned to their Government to do a job which they felt is in the public interest, could be done more economically by one central agency, and which had never before been undertaken because it cut across so many fields and therefore was assumed by no one.

As an indication of the enthusiastic support which this Clearinghouse has already received in the few months of its existence, over 2,000 research workers have volunteered information about 1,400 research projects concerning children that are now in progress. These projects will shortly be reported in a Bulletin, copies of which have been requested by everyone of the 2,000 contributing workers. Great numbers of these workers have told us that this Bulletin will be an invaluable tool in planning their research programs more effectively and in relating them to work being done elsewhere on problems of child growth and development.

The Clearinghouse is receiving visits and letters from people who ask such questions as: Is anyone correlating personality problems with type of adoptive placement? Where can we learn what surveys of school health services have been made in recent years? Who is studying detention homes? Has anyone reported work on Methemoglobinemia? Have you a list of active projects in the field of child development? These questions are asked because researchers want to exchange ideas and prevent duplication of effort.

Funds available for this activity are extremely limited; in fact they provide for only three employees.

If there are qualified research workers in Hawaii who you think would benefit from knowing of allied research in their fields, we will be most happy to send them copies of the Bulletin. Similarly there must be professional people in the States who would be interested in research now going on in Hawaii. Perhaps you would care to pass on the enclosed questionnaires to research workers in the field of child growth and development with whom you may be in touch.

CLARA E. COUNCELL
Director, Clearinghouse

Washington, D.C.
June 10, 1949

ERRATA

Acknowledgment to Dr. Morton E. Berk and Dr. Leon Mermod for their cooperation and assistance in its preparation was inadvertently omitted from the case report entitled Multiple Transfusions in Chronic Lymphatic Leukemia, by Edith Maeda and Larri Welty, published in the last issue of the JOURNAL.

Also in the last issue, in the summary and conclusion of "Paratyphoid A Fever," S. typhimurium in group C should be in group B.

RAFE NELSON HATT
1889-1949

The community in general and the medical profession in particular were shocked at the news of the death of Dr. Hatt, who died unexpectedly at his home on May 27.

Born in West Paris, Maine, November 11, 1889, he prepared for college at Brighton Academy at Harrison, Maine, and graduated from Colby College in 1914, studied medicine at Tufts Medical School, graduating in 1918. He served as orthopedic interne at the Massachusetts General Hospital in Boston and while there enlisted in the Medical Corps remaining on active service, however, at the same hospital. He was assistant surgeon from 1920-1922.

During his years at the Massachusetts General Hospital his work was so outstanding that Dr. Robert Osgood, under whom he studied, recommended his appointment to the Mobile Unit of the Shriners' Hospital for Crippled Children about to be established in Honolulu. He went to Atlanta, Georgia, and visited the Scottish Rite Hospital for Crippled Children, after which the Shriners' Hospitals were patterned. With this background, he accepted the Honolulu appointment and assumed charge here in 1922. He left Honolulu in November, 1924, to take charge of the Springfield unit, where he served until he entered the Army in 1942. After his discharge from the Army in 1946, he returned to Honolulu and resumed charge of the Shrine unit here.

He was a Fellow of the American College of Surgeons, a member of the American Orthopedic Association, American Academy of Orthopedic Surgeons, and the Forum Orthopedic Group, and a Fellow of the New England Surgical Society and the American Medical Association, together with the Hawaii Territorial Medical Association and the Honolulu County Medical Society. He had been an honorary member of the latter since 1922.

He hated sham and incompetent work. During his long service with the Shriners' Hospital, as well as in private practice, he achieved remarkable results. His friendly manner and pleasant disposition, and his willingness at all times to lend a hand to a fellow doctor, endeared him to all the members of the profession. No patient under his care ever entertained other than hopeful anticipation of the ultimate outcome. All who came in contact with him felt that if it was humanly possible to effect a cure or improve a crippled individual sufficiently to enable him to lead a normal life, Dr. Hatt would be able to do it.

While in New England he was the recipient of the Pynchon Medal, awarded annually in the community for outstanding service to the community. His Alma Mater, Colby College, presented him with the honorary degree of Master of Arts at its commencement in 1938.

As a young surgeon in Honolulu, it was his philosophy that if a boy or girl in the hospital is not happy, it is because he is suffering or is being mistreated. It was hard, in fact impossible, to maintain strict discipline in the hospital when Dr. Hatt was present. An unverified episode is to the effect that he was at one time called before the Board of Trustees of the Springfield Unit on the complaint of the supervising nurse who charged that she was unable to maintain any discipline at all whenever Dr. Hatt was on the ward, while at other times her charges were obedient subjects. It appears that this was literally true, the little fellows were quite orderly and sedate at other times but pandemonium broke loose whenever "Kauka Papale," as the little kids in Honolulu called him, came on the ward.

Dr. Hatt is survived by his widow, Dr. Edna Hatt to whom he was married in 1918, and three children. They are Dr. William S. Hatt, interne at The Queen's Hospital, Honolulu; Mrs. William P. Box of Salem, Massachusetts; and Miss Constance Hatt.

GROVER A. BATTEN, M. D.

Fifty-Ninth Annual Meeting

Hawaii Territorial Medical Association

MABEL SMYTH MEMORIAL BUILDING
Honolulu, Hawaii, May 5-8, 1949

The fifty-ninth annual meeting of the Hawaii Territorial Medical Association was held in the Mabel Smyth Memorial Building. The following program was presented:

SCIENTIFIC PROGRAM

Recent Advances in Pediatric Therapeutics, by Hugh McCulloch, M.D. (by special invitation).

The Racial Incidence of Coronary Thrombosis in Hawaii, by Henry C. Gotshalk, M. D. and John Bell, M.D.

Hawaii's First Hospitals, by Robert C. Schmitt (by special invitation).

The Responsibility of the Surgeon in the Control of Cancer, by George T. Pack, M.D. (by special invitation).

The Use of Dermal Grafts for Tuberculous Stenosis of the Trachea and Bronchi, by Paul Gebauer, M.D.

Sulfone Therapy in Leprosy: A Three Year Study, by Norman R. Sloan, M.D.

Changing Indications for Therapeutic Abortion in Pulmonary Tuberculosis, by Herbert E. Bowles, M.D. and C. A. Domzalski, Jr., M.D.

Behavior Problems in Pediatric Practice, by Hale F. Shirley, M.D. (by special invitation).

Recent Advances in Psychiatry, by Marcus Guensberg, M.D.

MEETINGS

Council—Thursday evening dinner, Pacific Club.

House of Delegates—Friday afternoon, 2:00, Mabel Smyth Building.

House of Delegates—Saturday morning, 10:00, Mabel Smyth Building.

Advisory Committee to the Bureau of Crippled Children, Thursday afternoon, Cerebral Palsy Treatment Center, Kapahulu Health Center.

Advisory Committee to the Bureau of Maternal and Child Health, Thursday afternoon, Mabel Smyth Building.

Round Table Meetings, Saturday morning breakfast, Pacific Club.

Surgery—led by George T. Pack, M.D. and Curtice Rosser, M.D.

Rheumatic Fever—led by Hugh McCulloch, M.D. and Hale F. Shirley, M.D.

SOCIAL PROGRAM

Dinner Dance—Saturday evening, Pacific Club.

Golf—Sunday morning, Waialae Golf Club; F. C. Spencer, M.D., in charge.

Picnic—Sunday noon, Kamehameha Alumni Clubhouse.

NOTES

Scientific papers presented will be published in the HAWAII MEDICAL JOURNAL.

The second annual exhibit of the Hawaii Physicians' Art Association was held in the Honolulu County Medical Library during this meeting.

An exhibit of electroencephalography was displayed in the Stella Lowrey Room of the Mabel Smyth Building.

The address of the President, minutes of meetings and reports follow:

ADDRESS OF THE PRESIDENT

JOSEPH PALMA, M.D.

Fellow members, friends and colleagues of the Hawaii Territorial Medical Association:

I want you to know how deeply appreciative I have been of the honor that you have conferred upon me as your elected President during the past year. The responsibility has been great, the duties often arduous. but I want you to know that I have enjoyed every minute of it and hope that my efforts have in some small way added up to a satisfactory performance of duty somewhere near the peak of achievement that was expected and demanded of me. As I have just said, it has been a pleasure. It has been an enjoyable year, but make no mistake, I would not want to do it again for twice President Truman's tax-exempt expense account.

Whatever has been accomplished this year has been the result of the efforts of many men who have faithfully served on the various committees. Everyone cannot be mentioned, of course, but I am particularly indebted to Dr. Robert Perlstein who has served these many years so faithfully as Chairman of the Scientific Works Committee. His remarks on the coordination of all medical activities having to do with the importation of speakers and important men in medicine are most happily made and strict attention should be paid to his recommendations.

Dr. Steele Stewart who did a monumental piece of work over the past two years has only this reward for his tremendous efforts; namely, his idea of a single fee schedule for all contractual obligations based on a unit system and tied onto the basic wage rate of the Territory, as determined by the United States Department of Labor, was in advance of its time. A truly tremendous amount of work that was accomplished by him and his committee have not been wasted as I am sure that in due season, their conclusions will be adopted by the medical fraternity.

My thanks go, also, to Dr. Robert B. Faus who has in his quiet and most efficient way developed the program for civilian disaster relief and its companion project, the procurement and assignment of physicians to military duties when the call for these men arises.

Dr. Forrest J. Pinkerton, Chairman of the joint Medico-Dental Public Relations Committee deserves our thanks for a tremendous job well done even though a small segment of our membership continues to vociferously oppose the accomplishment of this committee. More of this later.

Lastly, my personal aloha goes to our efficient Executive Secretary, Mrs. Edith Bennett, whose untiring efforts and splendid cooperation enabled me to conduct the affairs of this office satisfactorily.

Historically, the records should show the consummation of certain events for better or worse, and to paraphrase the remark about women that you cannot live with them and also you cannot live without them, the past year marks the inauguration of the Woman's Auxiliary to the Territorial Medical Association and the various county components. We are indebted to the Woman's Auxiliary for their arrangements having to do with the banquet Saturday night, entertainment this afternoon of the wives of the doctors from the outer Islands, and the old-time, pre-war picnic party on Sunday. I am sure you will agree with me at the conclusion of these parties that devoted wives, members of the Woman's Auxiliary, have the know-how in the arranging and carrying through of successful social events.

The past year saw the successful staging and conclusion of the Fourth International Congress of the Pan-Pacific Surgeons. This outstanding event in the scientific and social life of the countries bordering on the Pacific was made possible by the splendid efforts and cooperation of the members of our profession, locally.

Mention must be made, also, for completeness of the record, of the dedication of the so-called outstanding military medical center of the world, the Tripler General Hospital. Much has been said and can be said about this intervention of Government into the practice of medicine under the guise of military expediency. I only want to call attention to the fact that this tremendous edifice was erected at the cost of around $30,000 per bed and that the patient day cost is about four times the going rate of patient day cost in civilian hospitals in the community. I am not one to admit that the Government can practice medicine better than we can in private life, but I am perfectly willing to admit that they can do it much more expensively, for just about four times as much. Do not accuse me of bias because I happen to be an old Navy medical man, but the citizens and taxpayers of this country cannot afford this expensive luxury in the treatment of the sick. All of you will agree with me that the disabled, wounded or needy veteran of *combat* deserves the best that this country and the medical profession have to offer, but we do not need this expensive monument dedicated to the many who are only pawns of the master planners, intent upon forcing political medicine upon the citizens of this great country.

Due notice should be taken of the fact that during the past year greater interest has been taken by the membership in the professional and socio-economic activities of our Territorial Association than in any other period of time in our long and distinguished history. This remark could also be catalogued as a gross understatement, as interest could be further qualified as having attained fever pitch or having attained the status of near-combat. All of this has been of benefit to the profession and its organized representative body, the Territorial Medical Association. This heightened interest has, unfortunately, resulted in some confusion in the laudable and most desirable efforts to maintain the American way and the democratic principles of conducting business.

I do not mean to pose as a political pundit, but I am informed that the founding fathers set up a federation of strong states which allocated to the central Government only such powers as were necessary to sustain the integrity of the whole body; mainly, defense. This federation of states functioned by a device of elected representatives, and tradition and precedent established the method of a two-party system. We have always had the "in's" and "out's" regardless of the political party label attached to them. Your American Medical Association was founded and organized along the same lines as a federation of state medical societies. Your affairs are conducted in the democratic tradition by your elected representatives and when you join your local county society, even though you do not take an oath of obligation, you, in fact, subscribe to the constitution and by-laws under which it is organized. These county units make up and constitute your State or Territorial body which in turn are in a federation, your A.M.A. Your elected representatives have clearly defined duties and obligations set forth in the constitution and by-laws and they interpret your wishes and desires. Decisions must be made. Certain courses of action must be agreed upon by your elected representatives after due deliberation and consultation with the best authorities available. These actions are legally and morally binding upon each individual member, and individual action contrary to the wish of the majority, as interpreted by your elected officials, results only in disunity and much bitter feeling. Do not mistake me, interest in the affairs of your medical association is of the greatest importance, and it is quite proper that, in our democratic way, the "out's" get in, and vice versa. All of this means progress and the betterment of the affairs of each and every member, but these things are our own business, and we must be very careful that we do not give the impression to the public at large that disunity is rampant among our ranks. A unified front is of the utmost importance in those areas of activity in which we join with the general public. These areas of activity are mainly three:

(1) Fee schedule; (2) Voluntary pre-paid, non-profit medical and surgical plan; (3) Public relations.

Now it is difficult to break these three down into separate categories as each interlocks with the other, but in the effort to clarify my statement, they will be discussed separately. We must have a fee schedule which represents the going rate for services rendered to persons of a comparable and average income. In the very near future, almost 100 per cent of every physician's practice will come under or be covered by some form of insurance—industrial accidents, fees for service type of coverage, or cash indemnity, V. A., BCC, etc. There will be very little of the private practice of medicine left, as we now know it. It is important that the fees paid for services rendered under these various insurance contracts be the going rate for such services. If we do not remain united on what we consider fair fees for services rendered, we will be manipulated between various powerful economic forces, so that very shortly the lowest fee for service rendered paid in the community will become the going rate. This leads to cut-rate medicine which results in the deterioration of the quality of medical care and that only results ultimately in the damaging of the health of the individual and the community. We should all continue to resist to the utmost any and all efforts to interpose a third party in the historical and traditional doctor-patient relationship.

These remarks tie in directly with point Number 2, the voluntary pre-paid, non-profit medical insurance plan, which in the Territory is the Hawaii Medical Service Association, a joint project of the medical profession with the community, devised and planned in such a way that citizens are enabled to budget against

the cost of medical care. The H.M.S.A. offers a comprehensive medical service type of contract covering the cost of hospital, surgical and home and office care. These policies can be purchased (as a unit or any part of the three) by employed groups of people. In the very near future, these contracts will be offered to anyone in the community under certain conditions, thereby meeting the demand of the public, and particularly industry and labor, for a comprehensive service type of plan. Although a perfect plan will never be written because of certain inherent defects in all types of insurance, the H.M.S.A. stands a good chance of arriving at an acceptable and economically sound plan by reason of the continued efforts of the professional and business representation on the Board of Directors. We must, of course, continue our 100 per cent support of the H.M.S.A. for many obvious reasons, but particularly because we have a strong voice in its management. The filling out of necessary insurance forms is a most irksome task for all busy physicians, but I want to remind you that what we have to do now in filling out forms for voluntary insurance plans is negligible compared with what we would have to do if the Government takes over. For that reason, as a profession, we are strongly in support of sound voluntary pre-paid medical care plans whether they be of the service type or cash indemnity type. Keep your thinking clear on this point. Service types of insurance imply a contract between the insurance carrier and the profession, with payment for services made directly to the physician or hospital involved. Cash indemnity insurance is a contract merely between the carrier and the policyholder. There is not, and should not be, any contract between the carrier and the physician, as payment is made to the policyholder under a schedule of indemnification payments decided upon by the carrier. Indemnification payment to the policyholder happens to be about 50 percent of the going rate for services rendered in this community, which is all right, as long as the policyholder realizes that he will receive a bill for services rendered by his physician in excess of the indemnification paid by the carrier. If large numbers of physicians accept the indemnification to the patients as full payment for services rendered, they will, in fact, establish a fee schedule which will be 50 per cent of the one adopted by the county societies. We will then have lost a large measure of professional freedom and such a situation would be only a little less odious than having the Government take us over.

Now then, last but not least, that hotly debated subject of our public relations. I am sure that history will record and majority opinion concur in the statement that your Public Relations Committee has done an outstanding job over the past two and one-half years. Starting from scratch, absolutely cold, in a new field of endeavor of the profession, your Committee has done outstanding work both in pioneering and implementing the various techniques and devices in this new field. We have, for example, the first joint Medico-Dental Public Relations Committee in the country. A detailed record of the Committee's activities and achievements will be presented to you by the Chairman, Dr. F. J. Pinkerton, at tomorrow afternoon's business session. I earnestly request full attendance and full discussion on the report because whether we like it or not, we are in the field of public relations to stay. We must have an affirmative plan of action and the program must be a long-range continuing program. It is no longer enough to meet only emergencies as may arise when the Legislature is in session, so until the collectivistic philosophy of the welfare state which in the end can only result in the slave state of communism is thoroughly and decisively defeated, we will have to continue to oppose those forces which would regiment us into a state of political medicine. Regrettable as it may be, these forces of collectivistic philosophy have compelled us to come down out of the ivory tower of professional altruistic freedom. Also, because of strong economic forces, we have had to conduct our affairs more and more as a business. We, therefore, have to adopt the devices of businessmen and the development of public relations is such an outstanding device. Our problem is part of a very large social problem in western civilization today, and it is so very important because we are the spearhead of that problem. If the physicians of our great profession lose their individual freedom through the device of compulsory medical insurance and the advent of government-political medicine, all the rest of the people will come tumbling soon after into the same deep pit of darkness of the slave state. We must continue to maintain our high standards of professional and ethical excellence. We must continue to keep our own house in order by continuing to analyze and study our own relations with the public, and we must continue to work together harmoniously in the development of a long-range affirmative course of action that will help the public meet their needs in obtaining good medical care in this changing post-war world. This course of action constitutes good public relations. We cannot let down. We cannot quit now, for as a distinguished American once said, "Eternal vigilance is the price of freedom."

MINUTES OF MEETING
COUNCIL
Thursday, May 5, 1949, at 6:30 p.m.
Pacific Club

Present: Dr. Joseph Palma, presiding; Drs. H. L. Arnold, Jr., Fred Lam, John Sanders (Maui), H. E. Crawford (Hawaii), S. R. Wallis (Kauai), R. O. Brown and F. J. Pinkerton.

Minutes: The minutes of the Council meeting of December 16 were read and approved.

Journal: The Councillors from the other islands suggested that the secretaries of their societies be members of the JOURNAL Board.

ACTION: On motion of Dr. Arnold, Jr., seconded by Dr. Lam, the Council appointed the present members of the HAWAII MEDICAL JOURNAL editorial board to serve for another year, except that Dr. Palma will be replaced by Dr. Crawford, Dr. K. Izumi by Dr. R. F. Cole, Dr. H. E. Crawford by Dr. R. M. Miyamoto and Dr. W. W. Goodhue by Dr. J. R. Mason.

Finances: The Treasurer's report was read. A note was added concerning the books and journals contributed to the Library in addition to the cash donation.

ACTION: The Treasurer's report was approved on motion of Dr. Pinkerton, seconded by Dr. Wallis.

Mrs. Bennett's separation from the Honolulu County Society was discussed.

ACTION: Dr. Wallis moved that the following budget be accepted including (1) a salary of $450 per month for Mrs. Bennett from the Territorial Medical Association, (2) a salary of $125 per month for Miss Shizuko Odo and (3) an increase of $5 per member in Territorial Association dues. The motion was seconded by Dr. Brown and passed.

BUDGET 1949-50

Expenses	
Library	($1,100 in new books and journals)
Salaries	$6,600.00
Rent	720.00
Postage	375.00
Journal Expense	9,400.00
Travel	175.00
Taxes	70.00
Supplies	250.00
Telephone and Telegraph	165.00
Auditing	75.00
Miscellaneous	175.00
	$18,005.00
Income	
Dues (365)	$7,300.00
Journal Advertising	7,000.00
Journal Subscriptions and Sales	2,300.00
Annual Meeting	1,000.00
	$17,600.00

Public Relations: The proposed public relations budget was discussed at great length. Dr. Arnold reported that Honolulu would like to see the present territorial public relations program abolished, the funds on hand returned to the county societies and the dentists on a pro rata basis, and that in future the program be carried on a county level with the help of national material channeled through the territorial secretary. Dr. Sanders stated positively that Maui did not want to carry the ball for its own program. They would welcome an opportunity to carry on in the future such a territorial program as we have been having. Dr. Wallis agreed it would be impossible for the Kauai doctors to carry on their own program without the assistance of the territory. Dr. Pinkerton stated that the proposed budget was based on 3 years' experience and was not unduly expensive in comparison with other programs. The Council asked that the budget be broken down to show how salaries will be used.

Dr. Palma read a letter from the Dental Society confirming their satisfaction with the present territorial public relations program and pledging their continued support of such a continuing program on a territorial level. They further stated that they would withdraw their support if the program were reduced to a county level.

ACTION: Dr. Wallis moved that the Council approve the proposed public relations budget and recommend its acceptance by the House of Delegates. The motion was seconded by Dr. Sanders and passed with one dissenting vote—that of Dr. Arnold.

A.M.A. Delegate: The Council were informed that the By-Laws of the A.M.A. have been amended since Dr. Pinkerton and Dr. Hartwell were elected in May, 1948, to serve for two years. According to the A.M.A., delegates elected at any time in any state or territory will take office the first day of January following their election and serve for two years. Thus it would be in order for the House of Delegates to elect at this meeting a delegate and alternate who will take office January 1, 1950. It was also pointed out that expenses of delegates are included in the proposed public relations budget.

HMSA: The chairman read the following two letters concerning HMSA:

TENNENT & GREANEY
May 4, 1949

Executive Director
Hawaii Medical Service Association
Honolulu, T. H.

In reply to the request of your Executive Committee, we wish to certify to the following:

We have been auditors of the Hawaii Medical Service Association since its inception;

In every year since its inception, except for the first year, the Association has shown a surplus of income over expenditure;

Except for a minor investment in office equipment, this surplus is represented in cash or securities (mostly U. S. Treasury Bonds);

The Association is in very sound financial condition, with ample reserves for any foreseeable contingency; the Association is conducted upon sound accounting principles and any recommendations by ourselves as auditors have been complied with.

TENNENT & GREANEY,
Certified Public Accountants

LEWIS, KIMBALL & BUCK
May 4, 1949

Mr. O. B. Patterson, Executive Director
Hawaii Medical Service Association
Honolulu, Hawaii

Dear Mr. Patterson:

In response to your request for information as to the present legal status of the Hawaii Medical Service Association, please be advised that the HMSA presently operates under Territorial law as a mutual benefit society, and, as such a society, is given a specific tax exemption. It also enjoys a Federal tax exemption by express ruling of the Internal Revenue Department. The Constitution and By-Laws of the Hawaii Medical Service Association, as amended last year, were properly filed with the Insurance Commissioner, who has jurisdiction of such societies, as required by law.

No additional steps have been taken toward incorporation for the reason that in our opinion neither the directors nor the members are personally liable for the obligations of the Association, and for the further reason that to incorporate would be a cumbersome procedure due to the necessity of making all policy-holders members of the corporation.

LEWIS, KIMBALL & BUCK

ACTION: Dr. Sanders moved that the Council recommend to the House of Delegates and the membership that they reaffirm their continued confidence in HMSA and pledge their full support to this plan of voluntary health insurance for Hawaii. The motion was seconded by Dr. Lam and passed unanimously.

The chairman also said that each county society will be informed of changes in the executive board of HMSA.

Dr. Crawford: Since Dr. Crawford will assume the presidency, his resignation as a Councillor, effective May 8, was accepted.

HARRY L. ARNOLD, JR., M.D.
Secretary

MINUTES OF MEETING HOUSE OF DELEGATES

Friday, May 6, 1949, at 2:00 p.m.
Mabel Smyth Auditorium

Present: Dr. Palma, presiding; Drs. Arnold, Jr., Underwood (Maui), Seymour and Bernstein (Hawaii); H. R. Benson, Edwin Chung-Hoon, French, T. Hata, H. M. Patterson, L. Wiig, J. Bell, Gaspar, Gotshalk, Nishijima, Spencer and Yee (Honolulu), Wade (Kauai), Burden and Tompkins (Maui), of the House of Delegates, and other members of the Territorial Medical Association.

Reports: The following reports were read, accepted and placed on file:

Component Societies
1. Hawaii County—Dr. Leo Bernstein
2. Honolulu County—Dr. Samuel L. Yee
3. Kauai County—Dr. Burt O. Wade
4. Maui County—Dr. E. B. Underwood

Officers
1. Report of the Council—Dr. H. L. Arnold, Jr.
2. Report of the Secretary—Dr. H. L. Arnold, Jr.
3. Report of the Treasurer—Dr. Fred K. Lam

Committee Reports
1. Legislative Committee—Dr. Robert Faus
2. Journal Committee—Dr. H. L. Arnold, Jr.
3. Psychiatry and Neurology—Dr. Marcus Guensberg
4. Cancer Committee—Dr. Grover A. Batten
5. Woman's Auxiliary to the H.T.M.A.—Dr. Philip Arthur
6. Board of Management, Mabel Smyth Building—Dr. Samuel Yee
7. Health Education Committee—Dr. Marie Faus
8. Scientific Works Committee—Dr. R. N. Perlstein

The report of the Health Education Committee was accepted with the personal thanks of the President and with special commendation by the House of Delegates for a good job.

ACTION: On motion of Dr. Arnold, Jr., seconded by Dr. Gaspar, it was agreed that the new Secretary of the Territorial Medical Association should be instructed to communicate with the Cancer, Infantile Paralysis, Tuberculosis and Heart Associations and any other groups who may bring medical speakers here, asking them to cooperate by clearing their speakers through Dr. Hartwell, chairman of the Honolulu County Postgraduate Committee.

The House of Delegates adjourned to meet again Saturday at 10 a.m.

Respectfully submitted,
HARRY L. ARNOLD, JR., M.D.
Secretary

HAWAII COUNTY MEDICAL SOCIETY SUMMARY OF ACTIVITIES

Twelve regular monthly meetings and four special meetings were held during the year.

Eleven scientific programs were presented as follows:

April: "Listerellosis in Man" by Dr. T. D. Woo. "The Bacteriology of Listerellosis" by Mr. H. Minette.

May: "The Difficulties of Staying Simple and Practical in Pediatrics" by Dr. Edwin F. Patton, Beverly Hills, California.

June: "Head Injuries" by Dr. Ralph B. Cloward.

August: "Abdominal Pain" by Dr. Theodore Althausen, Professor of Medicine, University of California. "Precancerous and Cancerous Lesions of The Skin" by Dr. Harold Johnson.

September: "Typhoid Fever and The Treatment of a Case with Streptomycin" by Dr. T. Oto. Film on Pediatric Anaesthesia (Squibb).

October: Film on Curare in Barbiturate Oxygen Anaesthesia.

November: "The Care of Premature Infants" by Dr. F. D. Nance. "The Nursing Care of Premature Infants" by Mrs. Rae Keleher.

December: "Obstetrical Emergencies" by Dr. H. E. Bowles.

February: "The Diagnosis and Treatment of Leprosy" by Dr. Norman Sloan. "The Social and Emotional Development of The Child" by Dr. John Lynn.

In addition, the following programs were held:

March: "Medical Economics and H.M.S.A." by Drs. F. J. Pinkerton, Steele Stewart and Mr. Carl Flath.

October: "The H.M.S.A." by Mr. O. B. Patterson, Executive Director. "Proposed Program of The Hawaii Cancer Society" by Dr. G. Batten.

January: "Pressing Problems Facing The Medical Profession Today" by Dr. Joseph Palma.

A new constitution and by-laws was drawn up to replace the one lost in the tidal wave. Provision was made for a Public Policy and Grievance Committee composed of five members—the president, vice-president, secretary, treasurer and councilor. The functions of this committee include public relations, fee schedules, health and welfare.

A Disaster Council composed of six men—three in Hilo (Drs. A. Orenstein, Chairman; H. Crawford, H. Sexton) two in rural Hawaii (Drs. W. Seymour, C. Carter) and one dentist (Dr. C. Goo) appointed by the Hawaii County Dental Society. A Disaster Plan was formulated and approved by the Society.

Dr. R. Miyamoto was appointed a member of the Hawaii Cancer Society.

The Society approved the H.M.S.A. "C" Schedule plus 10% Additional Plan.

The Society approved the Revised Industrial Accident Fee Schedule for Workmen's Compensation Cases and the Revised Fee Schedule for Insurance examinations proposed by the Honolulu County Medical Society.

The Society approved and paid a $26 special assessment.

New members admitted during the year are Drs. John Jenkin, Richard Yamanoha and Pete Okumoto. Drs. Phillip Chock and Richard Arimizu resigned.

Dr. Vernon Jim transferred to the Maui County Medical Society.

Dr. C. B. Brown moved to the mainland.

The annual meeting was held at the Honokaa Club Hotel. Dr. Leabert Fernandez was host to the membership providing them with an excellent steak dinner. He was given a vote of thanks for his work as president during the year.

Respectfully submitted,
LEO BERNSTEIN, M.D., *Secretary*

HONOLULU COUNTY MEDICAL SOCIETY SUMMARY OF ACTIVITIES 1948 - 1949

The Society through its Fee Schedule Committee has been particularly active in trying to formulate the new industrial accident fee schedule with the insurance companies, although to date no conclusions have been reached.

The Society also has tried to budget its monies for the future years in view of the fact that remuneration for the care of indigent patients will not be forthcoming.

Other activities of note included meetings of the Grievance Committee and the usual postgraduate lectures in May. This year the postgraduate lectures were given by Dr. Samuel Harvey, Professor of Surgery at Yale University, and Dr. Paul Klemperer, Pathologist at Mount Sinai Hospital. These lectures were well attended.

The President has worked diligently toward creating greater interest of the membership toward its Society activities and has started the Board of Governors' Bulletin to keep members well informed.

In general, the Society has had a very active year in view of changing conditions—both local and national.

Respectfully submitted,
SAMUEL L. YEE, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY SUMMARY OF ACTIVITIES 1948 - 1949

The Kauai County Medical Society holds its monthly meetings at the G. N. Wilcox Memorial Hospital, Lihue, Kauai, T. H., on the second Wednesday of each month at 7:30 P.M.

A. Personnel:

1. The Society lost one member during the year 1948-49: Dr. David Liu of the McBryde Sugar Plantation, Eleele, Kauai died on February 9, 1949 of heart disease.

2. Three new members joined the Kauai County Medical Society in the year 1948. Dr. Bickell, who relieved Dr. W. E. Toney at the Kilauea Sugar Plantation in Kilauea, Kauai, T. H. Dr. Clyde Ishii opened offices for the private practice of medicine and surgery in Lihue, Kauai, T. H. and Dr. James Mason who associated with Dr. Sam Wallis in Lihue, Kauai, T. H.

3. Dr. Hon Chong Chang, an active member of this Society is continuing his specialization in radiology in Pennsylvania. He has continued to pay his dues but is exempted from the payment of special assessments and fees until he returns to the practice of medicine.

4. Dr. V. A. Harl, who is now practicing in Honolulu, was placed in the status of an honorary member following the October 12, 1948 meeting of the Kauai County Medical Society, as it was felt that he had planned to retire from active practice.

5. Dr. A. H. Waterhouse, honorary member of this Society expired on December 24, 1948.

6. There are 15 members in this Society—thirteen who are in active practice on Kauai, two who are honorary members and one who is in Pennsylvania specializing in Radiology.

ACTIVE MEMBERS

Dr. E. A. Bickell	Dr.W. W. Goodhue
Dr. W. Boyden	Dr. C. H. Ishii
Dr. M. Brennecke	Dr. J. M. Kuhns
Dr. H. C. Chang	Dr. J. Mason
Dr. D. R. Chisholm	Dr. E. Masunaga
Dr. P. M. Cockett	Dr. B. O. Wade
Dr. K. Fujii	Dr. S. R. Wallis

HONORARY MEMBERS

Dr. V. A. Harl	Dr. Lawrence Patterson

B. Public Welfare:

1. Laboratory procedures such as smears, serological examinations and bacterial count of water specimens are done by Mr. George Fernandes of the Board of Health Laboratory in Lihue, T. H. There is no available pathologist on Kauai nor the possibility of obtaining a pathologist in the near future.

2. The members of this Society have followed with interest and enthusiasm the policies and business of the Medical Economics Committee of the Hawaii Territorial Medical Association. Contributions have been 100% for the years 1946, 1947 and 1948. This Society contributed 100% to the recent (1949) A.M.A. assessment of $25 per capita.

3. Blood Bank:

There is no blood bank on the island of Kauai at the present time. This County Society does not favor the facilities offered by the Honolulu Blood Bank because the present system of voluntary and professional blood donors available to both the Waimea and G. N. Wilcox Memorial Hospitals are considered satisfactory. The disadvantage of affiliating with the Honolulu Blood Bank also brings up the question of transportation difficulties.

C. Legislative Activities:

1. The Legislators of both the Republican and Democratic parties met with the Kauai County Medical Society members, giving us their platform. The majority of the Legislators were opposed to socialized medical care and assured the members of their stand against it.

2. The Kauai County Medical Society went on record as recommending that the position of Nutritionist on Kauai be maintained and more firmly established by incorporating it into the framework of official Territorial agencies as a duly appointed Territorial position. Dr. Wilbar, President of the Board of Health, and the Kauai Legislators were contacted concerning this.

D. Scientific Measures:

1. Dr. F. Bernard Schultz of Honolulu gave an excellent talk on cardiac emergencies, recent advances in treatment and the electrocardiogram.

2. Dr. Samuel Harvey of Yale and Dr. McCormick of the University of Indiana gave interesting talks on their specialties.

E. Fee Schedules:

1. Dr. J. Palma, President of the Hawaii Territorial Medical Association visited Kauai in December 1948 and spoke to the members, explaining the purpose of medical pre-pay plans and then discussed the new H.M.S.A. fee schedule, the Industrial Accident fee schedule and the relation of medical care to industry and the community.

2. The Kauai County Medical Society unanimously accepted the following:

(a) A separate H.M.S.A. fee schedule—old "C" schedule plus 10%.

(b) Revised preamble to the Industrial Accident fee schedule.

(c) Revised Life Insurance examination fees as follows—effective January 1, 1949:

Regular	$10.00
Short form	5.00
Letter of information	3.00

Respectfully submitted,

WILLIAM GOODHUE, M.D.
Secretary.

MAUI COUNTY MEDICAL SOCIETY
SUMMARY OF ACTIVITIES
March 1948 - March 1949

During the year March 1948-March 1949 the Maui County Medical Society had *ten* regular meetings of which *six* were purely business meetings and *four* were combined business meetings and clinical conferences. In addition to these meetings the society had two Sunday morning seminars, one of which was addressed by Doctors Strode, Wiig, Johnston and Hill on various surgical subjects. The other seminar was addressed by Dr. O'Brien, President of the Society of Thoracic Surgeons. The three clinical conferences were held at Kula Sanatorium, Malulani, Paia and Puunene Hospitals. There was one meeting of the Board of Governors of the Society to hear the report of Dr. Sanders on the meeting of the Council of the Territorial Society.

During the year, the Society lost the following members:

By death—
Dr. Frank St. Sure, Sr. (Honorary member)
Dr. Arthur C. Rothrock
By transfer—
Dr. Lewis Shapiro (To Honolulu)
Dr. Evelyn Ross (Marriage)
Dr. Francis K. Chu (Los Angeles County)

The Society gained the following members:

Dr. Guy S. Haywood (Elected)
Dr. William Toney (Transfer from Kauai)
Dr. Vernon Jim (Elected)

At present the County has the following resident doctors who are not members of the Maui County Society:

Dr. Joseph Ferkany (Awaiting 1 year residence)
Dr. William Allen (Who is now temporarily at Hana Hospital and is returning to the Mainland soon)
Dr. Seiya Ohata (Awaiting transfer from Kane County, Ill.)

There are 26 active members in the Society.

The Society as a whole has been active in the support of the Cancer Society, the Junior Chamber of Commerce's efforts to establish a blood bank and in support of all bills before the legislature pertaining to Maui. All Maui legislators were contacted in reference to Senate Bill 110. Through our efforts both Houses were convinced that the Maui County Hospital Managing Committee should have one member chosen from the Medical Society rather than from the Board of Health. The Bill was so amended and passed by both Houses of the legislature.

Respectfully submitted,

EDWARD B. UNDERWOOD, M.D.
Secretary

REPORT OF THE COUNCIL

Your Council met in June, August and December of 1948.

The June meeting was held to consider the possibility that the Territorial Director of Workmen's Compensation insurance was planning to establish a fee schedule without consultation with us. No action was taken except to request Dr. Stewart to ask Mr. Nils Tavares to investigate our legal standing regarding compensation. It does not appear that anything came of either the fee schedule or the investigation.

At the August meeting, several items of business were considered. The Council advised Dr. Majoska in his capacity as a member of the Medical Services Advisory Committee to the Department of Public Welfare that "free choice of physician" means free choice by the patient; that no branch of medicine should receive special treatment in the matter of remuneration; and that the phrase "high cost of medical care" should not be used in referring to the cost of hospitalization alone.

The Council voted unanimously to recommend to the county societies to continue to give their support to the H.M.S.A. in general and the present interim plan in particular.

The Council voted unanimously to establish a committee of eight, composed of the five members of the present Preparedness Committee of the Honolulu County Medical Society and one member from each of the other counties, to be designated as the Procurement and Assignment Committee for the Territory of Hawaii.

The Council also voted to recommend to the County Societies that membership on the various county Preparedness Committees be by election from the floor and that the membership specially delegate authority to these committees to act as committees on procurement and assignment.

The proposed Territorial Fee Schedule was approved in principle and was voted to be submitted to the membership of the Territorial Medical Association in galley proof for a referendum vote.

The Council approved of the newly organized Woman's Auxiliary to the Hawaii Territorial Medical Association and approved the Constitution and By-Laws in principle, subject to review and approval by the Advisory Council, consisting of Drs. Arthur, Murray and Cloward.

The Council authorized the billing of the component societies for the 1948 public relations assessment of $26 per member.

The Council approved the plan of the Better Business Bureau to send out a follow-up letter on a territory-wide basis in an effort to make the pledges not to accept rebates unanimous.

At the December meeting, the nutrition program of the Tuberculosis Association was approved for inclusion in the budget of the territorial health department; a letter was directed to be written to the medical members on the Board of Management of the Mabel Smyth Building expressing our appreciation for Mrs. Storme's services in managing the building; it was decided to bill the individual regular members of the Territorial Medical Association for the amount of the American Medical Association's $25 assessment; no action was taken on the decision of the Honolulu County Medical Society to reject the Territorial Fee Schedule in toto.

Respectfully submitted,

HARRY L. ARNOLD, JR., M.D.
Secretary

REPORT OF THE SECRETARY

The total membership of the Association in all classes is 416, of which 368 (14 more than last year) are paid regular members. By counties this membership is made up as follows:

	Reg. Mem.	Non-res. Mem.	Ret. Mem.	Life Mem.	Int. Mem.	Hon. Mem.	Serv. Mem.	Total all cl.
Hawaii	43	....	....	....	....	2	....	45
Honolulu	285	9	7	4	4	17	1	327
Kauai	14	....	....	....	....	2	....	16
Maui	26	....	....	....	....	2	....	28
	368	9	7	4	4	23	1	416

The total number of physicians licensed to practice medicine in the Territory of Hawaii as of April 1, 1949, is 513. Of this number only 433 are now residing in the Territory. Of these 394, or approximately 91 per cent, belong to the Hawaii Territorial Medical Association.

Respectfully submitted,

HARRY L. ARNOLD, JR., M.D.
Secretary

REPORT OF THE TREASURER

At the beginning of the fiscal year, March 1, 1948, we had a balance of $6,865.14 on hand (exclusive of the Public Relations fund which is reported separately). During the fiscal year the income was $16,994.83, of which $5,415 was paid as dues from the County Societies. The balance was from HAWAII MEDICAL JOURNAL advertising and subscriptions, annual meeting and interest. Expenses for the year amounted to $15,512.35 as follows:

Library	$ 100.00*
Journal expense	9,469.68
Fee schedules	320.00
Auditing	75.00
Miscellaneous	21.50
Postage	365.46
Rent	720.00
Salaries	3,900.00
Supplies	254.54
Taxes	219.32
Telephone	7.50
Travel	59.35
	$15,512.35

* Plus $625.00 worth of new medical books and approximately $500 in journals.

Allowing for taxes withheld but not yet paid when the books were closed, this left us with a balance on hand at the beginning of the present fiscal year, March 1, 1949, of $8,281.12.

Last year's income was greater than we had anticipated and the expenses were carefully kept below the

budget. However, in view of changes made by the Honolulu County Medical Society in its budget and office organization, a much heavier burden will fall upon the Territorial Association this year and we may be forced to draw upon a portion of the reserve. The Honolulu County Medical Society now has its own executive secretary, Miss Ann Fujitani. Mrs. Bennett is no longer employed by the County Society, whose Budget Committee recommended that her salary of $450 per month be paid by the Territorial Association, as well as half or more than half of the salary of Miss Shizuko Odo.

The Honolulu Society also recommends this year an increase of $5.00 per member in the dues of the Territorial Medical Association.

The accounts have been audited and found in good condition. The auditor's report is attached hereto.

Respectfully submitted,
FRED K. LAM, M.D.
Treasurer

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION

This year members of the medical profession have taken a keen interest in an active legislative program. The Legislative Committee has worked long and hard. We were most fortunate in receiving hearty cooperation from the legislators, the Board of Health, the dentists and the members of our own profession. We have had very close liaison with the Business Committee for Progressive Legislation and the legislative committee of the Oahu Health Council. The joint legislative committee of the Hawaii Territorial Medical Association and Honolulu County Medical Society met almost daily throughout the period the legislature was in session, considering each bill that pertained to health. We divided the responsibility among the members of this joint committee with the assistance of other doctors who were appointed as chairmen of subcommittees. Thus the doctor most intimately associated with each respective field studied the bills in that field, reported his recommendations and followed their course through the house and senate. For example, Dr. Chung-Hoon was responsible for the numerous bills on leprosy, Dr. Giles on administrative and Department of Public Welfare medical care, Dr. Moffat on ophthalmology, Dr. West on Emergency hospitals and aid stations, and so on.

Not only have all the individuals who assisted in the legislative program learned a great deal about how our laws are made, but we feel that the results have demonstrated the value of taking such an active interest. With few exceptions, we may say that the bills we favored were enacted into laws and those we opposed were not. H.B. 649 clarifying the autopsy laws was drawn up and introduced in the legislature at our request. With considerable boosting along the way, it passed the house and eventually was passed by the senate at 4 a.m. on the last day of the extension. It now awaits Governor Stainback's signature. The Board of Health was pretty well treated by the legislature, though the general budget is still to be trimmed and signed by the governor. We encountered opposition in connection with the provision for free choice of physician by the patient in workmen's compensation cases, in which the Honolulu Medical Society was particularly interested. However, we discovered where the difficulties lay and the Honolulu legislative committee plans to continue working on this project. At this legislative session, a bill for extensive compulsory health insurance ("socialized medicine") similar to that of 1947 was introduced. We are glad to report that the bill never poked its head out of the house health committee.

We approved of a joint resolution providing for a two-year study of the care of leprous patients in the Territory. We regretted that the Board of Hospitals and Settlement was abolished by S.B. 699: all our efforts to prevent the bill's passage failed.

We worked with the legislative chairmen in the other county medical societies on bills concerning their islands. In each case we were successful. Culminating our program to stamp out optical rebates, it is now illegal for opticians to give rebates in any form and licenses may be revoked for doing so. Many revisions in the laws pertaining to psychiatric patients, which we had been working on for years, were passed this year.

Rather than bore you with details of more than 200 bills, resolutions and reports which we studied, I shall merely express my appreciation to all those who assisted us, and recommend that the medical profession continue to maintain an active interest in Territorial legislation.

ROBERT B. FAUS, M.D.
Chairman

REPORT OF THE HAWAII MEDICAL JOURNAL

The HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN has been published bi-monthly throughout the fiscal year. The thickness of the JOURNAL has been slightly reduced and will probably be reduced somewhat further in the future in order to lower the slightly high ratio of reading matter to advertising material. The ratio has gone somewhat above one to one, and this costs money. The JOURNAL has kept its head well above water financially during the year. Its income from subscriptions and sales was $2,460.20 and from advertising, less discounts, was $7,323.95, a total of $9,784.15. In addition to this, we received 94 review copies of medical books valued at $625.00 and 110 subscriptions to medical journals on exchange valued at about $500.00, making a total income of $10,659.15. The JOURNAL expenses amounted to $9,469.68, making a total profit of nearly $1,000.00 for the year of which about $800.00 was contributed directly to the Medical Library.

We have made no major changes in the format of the JOURNAL or in the editorial staff. The volume of material submitted for publication continues to be just about what we need. Almost no papers have had to be rejected, although a few have been fairly extensively revised or abbreviated at our request before being used. It is recommended that you authorize the continued publication of the HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN during the coming fiscal year on the same basis as heretofore.

HARRY L. ARNOLD, JR., M.D.
Editor

REPORT OF THE COMMITTEE ON PSYCHIATRY AND NEUROLOGY

During the past year, a special column "Psychiatric Comment" was published regularly in the HAWAII MEDICAL JOURNAL. The column was dedicated to a discussion of psychiatric topics and current events in the field of psychiatry. A particular effort was made to acquaint the medical profession of Hawaii with the

public institutions serving the needs of the mentally ill, that is, the Territorial Hospital in Kaneohe, and the Bureau of Mental Hygiene of the Board of Health.

The Chairman of the Committee also served as Chairman of the Sub-Committee on Psychiatry of the Legislative Committee of the Territorial Medical Association. In that capacity, he submitted various reports and analyses of bills pertaining to mental health and the mentally ill.

Every effort was made to maintain contact by correspondence with the other members of this Committee living in the other islands.

MARCUS GUENSBERG, M.D.
Chairman

REPORT OF THE CANCER COMMITTEE

The activities of your Cancer Committee have been chiefly through representation on the Executive Committee and other committees of the Hawaii Cancer Society. The activities of the Hawaii Cancer Society have been covered by a report over the name of your chairman published in the HAWAII MEDICAL JOURNAL, March-April, 1949. Since that report was written, Miss Esther Lo has been sent to the University of California for training at the completion of which she will set up a laboratory at the Cancer Society here for carrying out the Papanicolaou technique.

Another accomplishment has been through cooperation with the Cancer Society in bringing Dr. George Pack of the Memorial Hospital, New York, to Hawaii for 16 days for the purpose of intensive education of the doctors of the Territory. This is particularly fortunate because Dr. Pack's knowledge of the subjects and his ability to present the same cannot be excelled. These lectures are in progress at the present time and the medical profession as a whole owes the Hawaii Cancer Society a vote of thanks for bringing Dr. Pack here at its expense.

Your committee approved the proposition of the Board of Health for establishing machinery whereby they could legally carry on cancer work with funds that might be at their disposal, such as the monies allocated by the Federal government to the Territory of Hawaii. The committee was not consulted and did not have anything to do with the recommendation of any additional sum to the Territorial Legislature.

G. A. BATTEN, M.D.
Chairman

REPORT OF THE ADVISORY COUNCIL FOR THE WOMAN'S AUXILIARY TO THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

The Advisory Council for the Woman's Auxiliary to the Hawaii Territorial Medical Association held two meetings during the last year. At these meetings the new Constitution for the Auxiliary was discussed and a final draft of the Constitution was approved.

The Auxiliary offered their assistance in the arrangements for the formal dinner dance of the Territorial Medical Association at the Pacific Club on May 7 and for the picnic at the Kamehameha Alumni Clubhouse May 8. This offer was accepted by the Committee.

The books of the Auxiliary were audited by the Chairman on April 26, 1949. The balance at that time after collection of all dues and deduction of all expenses was $156.45.

PHILIP S. ARTHUR, M.D.
Chairman

REPORT OF THE BOARD OF MANAGEMENT MABEL SMYTH BUILDING

The Board of Management of the Mabel Smyth Memorial Building concluded a very successful year so far as redecorating was concerned. This was managed and supervised ably by Mrs. Storme, who was in charge temporarily in the absence of Miss Eyman.

The meetings of the Board were held regularly every two months and one of the main issues was finances. It is to be remembered that during the war years and for some time after that, revenues were adequate, and a surplus was built up for the redecoration and refurnishing of the building It is now necessary to make plans for the future so that the monies coming into the treasury will be ample for its maintenance. The committee felt that there should be more generous use of the auditorium but that all parties should be subject to the agreed rates of rental with few exceptions.

One controversial subject that was settled was the ownership of the Mabel Smyth Building. A review of legal notes revealed that the property on which Mabel Smyth Building was built belonged to Queen's Hospital through a lease from the Bishop Museum. This matter was settled and also settlement of the use of the building and auditorium by Queen's Hospital, as well as other hospitals.

The perennial question is how to get more room. Everyone from the nurses to the doctors, including the Library, is asking for more space. This was mentioned in the report of a previous year made by me and I again wish to emphasize that we must consider this problem very seriously—and now!

SAMUEL L. YEE, M.D.

REPORT OF THE HEALTH EDUCATION COMMITTEE

The program of the Health Education Committee of the Territorial Medical Association has been very satisfactory for this year. The same general plan as in the preceding year was continued.

Our policy has been to furnish material and assistance to those who requested it as well as actively placing radio programs before the public.

Over forty broadcasts were sent over the Aloha Network of KHON and were simultaneously over the local stations on Oahu, Kauai, Maui and Hawaii. This time was generously donated as a public service of the radio station KHON. The newspaper announcements were paid for by the Honolulu Dairymen's Association through the W. H. Male Advertising Company, who also bought time before and after the programs. The platters used in the programs came to us free from the American Medical Association and consisted of thirteen records in a series called "Everyday Health Problems," thirteen called "More Life for You" and thirteen called "Guardians of Your Health." These were appreciated by many who heard them, both by verbal acknowledgment and through the letters asking more about the programs.

Nine series of platters were furnished to the Department of Public Instruction. These were "Music with Your Meals," "Why Do You Worry?," "Melody of Life," "Everyday Health Problems," "Fair and Cooler," "Physical Medicine," "The Public Comes First," "Guard-

ians of Your Health" and "More Life for You." Approval and assistance were given in the arrangement of similar broadcasts in the Japanese language for the cancer programs.

The American Association of University Women again asked for lectures for their medical section and Dr. Trexler gave an excellent hour on tumors of the eye, ear, nose and throat. Dr. Marie Faus gave the other lecture on psychosomatic medicine to a large and interested audience at Mabel Smyth Building.

Many letters of appreciation were mailed from time to time to various advertisers who sponsored fine educational ads, such as the Rexall diphtheria toxin ad, the Honolulu Dairymen's hospital series and the numerous sponsors of the Blood Bank and cancer programs. It has been the policy to praise good educational advertising when we found it and ignore that of which we did not approve.

I would also like to have the Association consider sponsoring a school of geographical medicine program during the year to come. The details of this school my committee is now working on.

It has been a short year but a pleasant one. The programs were well received and no one has criticized us for our methods of putting this before the public.

MARIE K. FAUS, M.D.
Chairman

REPORT OF THE SCIENTIFIC WORKS COMMITTEE

The Scientific Works Committee met a number of times during the year and sent letters to the program chairmen of the various county medical societies in an attempt to obtain papers for the annual meeting. The arranging of the scientific program for this year's annual meeting was somewhat complicated by the independent action of various specialized groups in arranging to bring speakers to the islands in pursuance of their special educational designs. Both of these specialized groups and the Postgraduate Committee of the Territorial Association made their choices at such a late date as to considerably embarrass the orderly procedures of the Scientific Works Committee. I would like to suggest as a policy for the future (1) that all specialty groups clear with the Postgraduate Committee before deciding to underwrite special speakers for the Territorial Annual Meeting and (2) that the Postgraduate Committee itself make its choices sufficiently early so that attempts to build a proper scientific program can be made somewhat easier. Cooperation of the members of the Committee has been of the highest order and my thanks are due to them. This has also been true of the membership as a whole. Finally my special gratitude is due to Mrs. Edith Bennett and Dr. Joseph Palma for whatever success the program of the annual meeting may have this year.

R. N. PERLSTEIN, M.D.
Chairman

MINUTES OF MEETING HOUSE OF DELEGATES

Saturday, May 7, 1949, at 10:00 a.m.
Mabel Smyth Auditorium

Present: Dr. Palma, presiding; Drs. Arnold, Jr., and Fred Lam (Honolulu), Underwood (Maui), Seymour and Bernstein (Hawaii), H. Benson, Chung-Hoon, French, T. Hata, H. M. Patterson, Wiig, John Bell, Gaspar, Gotshalk, Nishijima, Spencer and S. L. Yee (Honolulu), Wade (Kauai), Burden and Tompkins (Maui), of the House of Delegates and other members of the Territorial Medical Association.

Report: Dr. Faus presented the report of the Emergency Medical Service Committee. The report was accepted and placed on file.

Next Annual Meeting: It was agreed on motion of Dr. Seymour, duly seconded and passed that the next annual meeting of the Hawaii Territorial Medical Association would be held in Hilo on May 4, 5, 6, 7, 1950 and that the registration fee for the meeting would be $10.

Council: The minutes of the Council meeting held May 5, 1949 were circulated in order that the delegates might be familiar with the recommendations of the Council.

Finances: The Budget for 1949-1950 set forth in the Council minutes was discussed.

ACTION: Dr. Lam moved that the Budget be adopted as it was presented to the Council and House of Delegates. The motion was seconded by Dr. French. Dr. Arnold moved that the motion to pass the Budget be tabled. Dr. Gotshalk seconded the motion and it was passed unanimously.

H.M.S.A.: Letters were presented from Tennent & Greaney and from Lewis, Kimball and Buck setting forth the sound financial condition and legal status of the H.M.S.A. A question was raised concerning a report which had recently been circulated by Dr. Stewart concerning the fee schedule and the H.M.S.A. The chairman stated that no such reports have been circulated officially by the Territorial Medical Association office or the full Fee Schedule Committee.

ACTION: Dr. French moved that the House of Delegates accept the recommendations of the Council to reaffirm their continued confidence in H.M.S.A. and pledge their full support to this plan of voluntary health insurance for Hawaii. The motion was seconded by Dr. Burden and passed unanimously.

Public Relations: Dr. Pinkerton presented his recommendations and budget for the Public Relations Committee. Then followed a prolonged discussion of the public relations program and its financing. There was apparent a sharp divergence of opinion between the Honolulu delegates and those from the other islands. It was stated in the discussion, although not expressly stipulated by vote, that the approval of the budget was for the total amount and would not bind the committee as to individual items of expenditure. (Details of the discussion appear in the transcript on file.)

ACTION: Dr. Arnold moved that the Delegates vote to approve the proposed public relations budget as recommended by the Council. The motion, duly seconded, was unanimously carried by a standing vote, Dr. Gotshalk abstaining.

ACTION: Dr. Arnold moved, seconded by Dr. Gotshalk, that the functions of the Territorial Public Relations Committee be assumed for the coming year by a public service committee of the Territorial Medical Association to be appointed by the new president, the duty of which will be, in addition to the above, to instruct and direct and integrate the functions of the public service committees of the four county medical societies and of the dental association. The president will determine the number of members.

ACTION: Dr. Burden added an amendment that the committee will report to the county societies monthly. The amendment and the original motion were passed unanimously.

ACTION: The budget of the Hawaii Territorial Medical Association was untabled and accepted as presented on motion of Dr. Patterson, duly seconded. It was passed by a unanimous vote.

ACTION: After considerable discussion it was moved by Dr. Patterson, seconded by Dr. Bell and passed, that the delegate be sent to one meeting and the alternate to the Interim meeting and that $800 be paid for each man for the year out of the public relations fund.

Nominations: The report of the Nominating Committee was presented by the chairman.

The secretary was instructed to cast a unanimous ballot for the following:

President-elect	Dr. Hill
Secretary	Dr. Tilden
Treasurer	Dr. Chung-Hoon
Councillors	Dr. Wade (Kauai) Dr. McArthur (Maui) Dr. Orenstein (Hawaii)
Delegate to AMA	Dr. Hartwell
Alternate Delegate	Dr. Orenstein

By-Laws: Dr. Gotshalk proposed two amendments to the By-Laws: (1) That there shall be two meetings of the House of Delegates each year; and (2) that no Councillor shall serve for more than two consecutive terms or a maximum of three terms.

Fee Schedules: Dr. Seymour brought up the question of free schedules and asked if it might be discussed. The chairman stated that apparently the fee schedule problem was now in the hands of the Honolulu County Fee Schedule Committee.

The meeting adjourned at 2:00 p.m.

Harry L. Arnold, Jr.
Secretary

PROPOSED BUDGET 1949-50 MEDICO-DENTAL PUBLIC RELATIONS COMMITTEE

1. *Bills Outstanding,* estimated		$ 500.00
2. *General Overhead*		
Telephone and telegraph, supplies, postage, printing		2,500.00
3. *Literature, Subscriptions, Exhibit Material*		
6 pcs, at $50; 5 subs. Shearon, others		800.00
4. *Newsletters*		
Two per month		1,500.00
5. *Meeting Expense and Entertainment*		
Guest meals		
One committee luncheon per month		1,000.00
6. *Salaries*		12,000.00
Public Relations Director	$500.00	
News and radio writers	300.00	
Secretary	200.00	
7. *Travel*		3,000.00
1 mainland guest	$1,000.00	
2 mainland trips	1,400.00	
12 inter-island trips	600.00	
Total		$21,300.00
Cushion		700.00
TOTAL BUDGET		$22,000.00
Balance on Hand 5-1-49		$10,808.23
Return to dentists difference between $40 and $26 for 224 members 1948-1949		3,136.00
Balance		$ 7,672.23
Budget 1949-50		22,000.00
Amount to be raised for 1949-50		$14,327.77

The $14,327.77 equals $22.70 for 630 physicians and dentists. Suggest $26.00 assessment.

REPORT OF THE COMMITTEE ON EMERGENCY MEDICAL SERVICE AND PROCUREMENT AND ASSIGNMENT

Your Committee on Emergency Medical Service and Procurement and Assignment of Physicians for The Armed Forces met three times during the year.

At the first meeting, a plan of organization was discussed whereby a large number of casualties might be cared for in an orderly manner.

Questionnaires were mailed to every physician in the territory, and lists compiled assigning each one according to his occupational specialty or ability to serve in hospitals or as members of teams—surgical, shock, burn, orthopaedic, etc.

Hospitals have been inventoried and plans made for their utilization to utmost capacity.

Schools have been surveyed and bed capacity determined if converted to collecting station or clearing area use.

Requisitions have been prepared for necessary drugs, dressings, and equipment.

Ambulance units are planned for collection and transportation of casualties to and from hospital areas.

It was my pleasure to represent Hawaii at a meeting of State Medical Directors' Emergency Medical Service in Chicago, March 21, 1949.

At that meeting, Dr. Kiefer represented Civilian Defense Planning Committee from Washington; Colonel Paul D. Robinson from Office of Surgeon General, Army; Admiral Dearing represented the Navy; and Colonel Bulla represented the Air Force.

Each of the above addressed the meeting. It was quite apparent that the Armed Forces are eager to cooperate with the A.M.A. in every way in working out plans for securing doctors and their proper assignment to duties thereafter.

Robert B. Faus, M.D.
Chairman

MINUTES OF MEETING HOUSE OF DELEGATES AND GENERAL MEMBERSHIP

Saturday, May 7, 1949, at 1:30 p.m.
Mabel Smyth Auditorium

Following the meeting of the House of Delegates, the delegates returned to the auditorium to attend the last scientific session of the meeting. After the completion of the papers and discussion, further business was discussed.

Public Relations: Dr. F. J. Pinkerton presented the report of the Public Relations Committee, which was accepted. Dr. Palma expressed his personal thanks and aloha to Dr. Pinkerton, as well as the appreciation of the entire Territorial Medical Association for a monumental piece of work and for laying down a chart for guidance in a hitherto unknown field.

Advisory Committees: The recommendations of the Maternal and Child Health Advisory Committee and the recommendations of the Crippled Children Advisory Committee were read and discussed.

ACTION: Dr. Hartwell moved that the recommendations be referred to the Council for interim study and to the House of Delegates for action. Dr. Majoska seconded the motion. Dr. Dickson moved that the motion be tabled. This was seconded and passed with only two dissenting votes. Dr. Dickson moved that the two reports be adopted. Motion seconded and passed.

House of Delegates: Dr. Palma reported the actions of the House of Delegates taken at their meeting held today.

ACTION: Dr. Fennel moved the report be accepted. Motion seconded and passed.

The results of the election were announced. Dr. Clyde Phillips and Dr. Wiig escorted Dr. H. E. Crawford, the new President, to the chair.

ACTION: On motion of Dr. Dickson, duly seconded, a vote of thanks was extended to the retiring officers who had served through a very difficult year.

Meeting was adjourned.

HARRY L. ARNOLD, JR., M.D.
Secretary

RECOMMENDATIONS OF THE CRIPPLED CHILDREN ADVISORY COMMITTEE

1. Recommend to the Territorial Society that a repetition be made of the 1947 recommendations—

"The Committee recommended that the urgent need for hospital facilities for the convalescent and long-term care of crippled and other children, including educational facilities be brought to the attention of the Territorial Medical Association. It also recommended that a statement on the subject be prepared and forwarded as an open letter to the governor and legislators of the Territory."

In addition to this 1947 recommendation, the committee recommended that the Public Relations Committee of the Territorial Medical Association take it upon themselves, as a special project, to acquaint the press, public, and Territory, as well as the Legislature, the needs for long-term care for crippling conditions in the Territory and needs and requirements that we feel are necessary for such care in the islands. Passed unanimously.

2. It was recommended that the hard-of-hearing child be included in the Bureau of Crippled Children's plan of services for the crippled child.

3. It was recommended that the child with a congenital heart defect be included in the Bureau of Crippled Children's plan of services for the crippled child.

R. N. HATT, M.D.
Chairman

RECOMMENDATIONS OF THE MATERNAL AND CHILD HEALTH ADVISORY COMMITTEE

1. This committee strongly urges Rh testing of all obstetrical patients before delivery, and that hospitals make it routine to test all such patients upon admission unless tests have been made previously and the hospital has been notified of the results.

2. The Bureau of Maternal and Child Health set up, with any advice from the Advisory Committee it considers necessary, uniform forms to be presented to hospitals for the recording of information on all premature births.

3. A vote of confidence was given to the Bureau of Maternal and Child Health relative to the program of the child health conferences. This vote of confidence was to apply particularly to the efforts being made by the bureau to work with the doctors and its efforts to bring quality conferences to the group in the Territory in greatest need. Endorsement went to the Bureau in its endeavor to find out the needs of the group now being served in the conferences, and the efforts to bring these conferences within the limited budget of the Bureau.

4. This committee recommends that the Bureau of Maternal and Child Health within its means carry out as intensive campaign as possible to foster the idea of breast feeding among the medical profession and among the people generally.

F. D. NANCE, M.D.
Chairman

"Severe intractable asthma

requires more strenuous measures. . . . Aminophyllin in doses of 0.25 Gm. dissolved in 10 cc. of water is often very effective when injected intravenously."[1]

To relax spasm, relieve congestion and restore deep, regular breathing,

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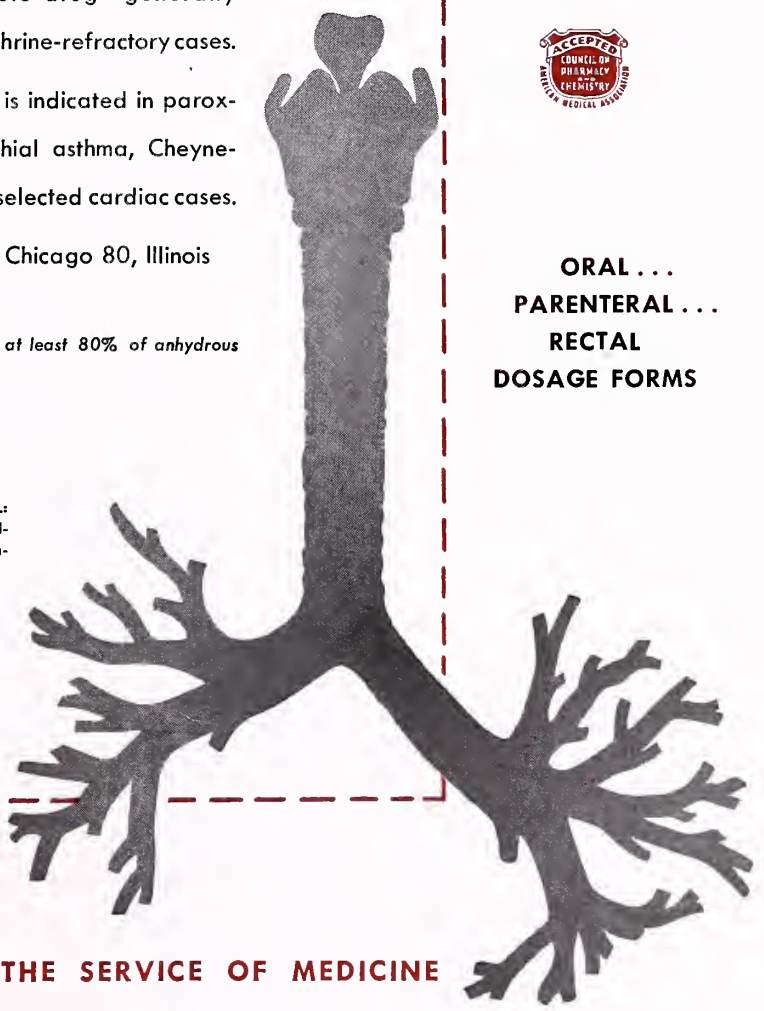
has proved a valuable drug—generally effective even in epinephrine-refractory cases.

Searle Aminophyllin is indicated in paroxysmal dyspnea, bronchial asthma, Cheyne-Stokes respiration and selected cardiac cases.

G. D. Searle & Co., Chicago 80, Illinois

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

ORAL . . .
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RECTAL
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Searle Aminophyllin contains at least 80% of anhydrous theophylline.

1. Rackemann, F. M., in Cecil, R. L.: Textbook of Medicine, ed. 7, Philadelphia, W. B. Saunders Company, 1948, p. 539.

SEARLE
RESEARCH IN THE SERVICE OF MEDICINE

FROM SECRETARY OF DEFENSE LOUIS JOHNSON—

AN URGENT APPEAL TO YOUNG DOCTORS!



Your personal help is needed to avert a serious threat to our national security!

By the end of July of this year we will have lost almost one-third of the physicians and dentists now serving with our Armed Forces. Without an increased inflow of such personnel, the shortage will assume even more dangerous proportions by December of this year.

These losses are due to normal expiration of terms of service. The professional men who are leaving the Armed Forces during this critical period are doing so because they have fulfilled their duty-obligations and have earned the right to return to civilian practice.

Without sufficient replacements for these losses, we cannot continue to provide adequate medical and dental care for the almost 1,700,000 service men and women who are the backbone of our nation's defense.

Normal procurement channels will not provide sufficient replacements!

To alleviate this critical, impending shortage of professional manpower in the three services, I am urging all physicians and dentists who were trained under wartime A. S. T. P. and V-12 programs under government auspices or who were deferred in order to complete their training at personal expense, *and who saw no active service,* to volunteer for a two-year tour of active duty, at once!

We have written personally to more than 10,000 of you in the past weeks urging such action. The response to this appeal has not been encouraging, and our Armed Forces move rapidly toward a professional manpower crisis!

Many responses have been negative, but worse—a great number of doctors have not replied. It is urgent that we hear from you immediately!

We feel certain that you recognize an obligation to your fellow men as well as to your profession in this matter. We are confident that you will fulfill that obligation in the spirit of public service that is a tradition with the physician and dentist.

There is much to be said for a tour of duty with any of the Armed Forces. You will work and train with leading men of your professions. You will have access to abundant clinical material; have the best medical and dental facilities in which to practice. You will expand your whole concept of life through travel and practice in foreign lands. In many ways, a tour of service will be invaluable to you in later professional life!

Volunteer now for active duty. You are urged to contact the Office of Secretary of Defense by collect wire immediately, signifying your acceptance and date of availability. Your services are badly needed. Will you offer them?

Louis Johnson

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

COMMITTEE

VIOLET BUCHANAN, *Editor,* Leahi Hospital, Honolulu
OLGA LARSON, *Territorial Association Secretary,* Honolulu
MYRTLE SCHATTENBURG, *Chairman, Nursing Information Committee,* Honolulu

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Social and Emotional Aspects of Tuberculosis

ISABEL MACKINNON*

A DISCUSSION of the social and emotional aspects of tuberculosis is a large order. It amounts to discussing the social and emotional aspects of life in general, complicated by some of the most difficult circumstances conceivable.

When we think of the wide variation in reactions to so-called normal life—even to the same environment, such as by siblings reared together, it is not surprising that so many problems can arise among people of vastly different backgrounds and strengths when they are forced to fit into a single situation essentially undesirable for all. It does not matter whether one has always had the relative financial security of the so-called middle class or has been brought up on the level between inadequate earnings and intermittent public assistance, whether he has always been loved or always rejected, whether he is a positive, capable, confident individual or a timid, dependent, helpless type—he will have to face illness; helplessness; limited activity indefinitely; regimentation; and loss of privacy, independence and self direction.

Financial problems to a greater or lesser extent are almost universal; but those (including some doctors) who contend that financial problems are the only social problems involved not only proclaim their own ignorance but can be charged with a definite responsibility for contributing to the emotional problems. Unless or until all the people who work with tuberculous patients recognize the social and emotional aspects, the patients will continue to defeat efforts at cure and thereby defeat the aims of all of us.

Dr. Julian Wolfsohn in his article in the National Tuberculosis Association Bulletin of March 1943 refers to the "ultimate oneness of mind and body" and says "Tuberculosis from the standpoint of both physician and patient has become one of the most hopeful diseases both from the method of treatment and more important still, from the prophylactic standpoint. Medical treatment alone cannot account for this change, since no specific drug is known to cure tuberculosis; but applied psychology, which has grown apace with medical management and when intelligently combined with it, has shared the fruits of successful treatment."

The exact psychological component and its role in helping or hindering cure is not clear but it has been definitely demonstrated that emotions are the chief mischief makers during the period of active disease. It has been said, too, that though the extent to which a predisposition to tuberculosis is on a psychosomatic basis is still quite an indefinite factor, those cases which seem to have such an element at the outset pose more problems in the way of cure—even of minimal infections.

The impact of the original diagnosis is so severe that a study of the various reactions during the earliest period followed up by a study of the success or lack of success of the same patients' subsequent adjustment to hospitalization and treatment would be a worthwhile project in itself. It might be possible to bring about a new approach to the problem of informing the patient of his diagnosis and thereby accomplish more

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along the lines of helping the patient to adjust to the diagnosis.

On the subject of accepting the diagnosis there are many possibilities also—even if we consider only those resulting from the method of telling the patient combined with the patient's own limitations, emotional, intellectual and educational. When we realize how many differences there are in the doctors' methods of informing and how reluctant many of the doctors seem to be to inform the patients in any detail, it is not surprising that the patients frequently are confused as to just what is wrong with them or that we so often meet people who deny any history of tuberculosis but on questioning admit being told previously that they had a small "spot" on the lung.

Often it seems ironic that while great stress is placed on the necessity of having a doctor do the original telling, the patient can and does frequently walk out of the doctor's office apparently in complete ignorance of the diagnosis and is eventually informed by the public health nurse or medical social worker. This is often the fault of the doctor, who knows so well what the question has been and what he means by what he says, that he may overlook the fact that the patient may not know what he thinks or means. It seems that some of the doctors are as resistant to the use of the word tuberculosis as the most prejudiced patients, and I am sure that many patients do not understand that a little "trouble" in the chest means tuberculosis. Sometimes even using the word is not enough and it is necessary to realize the patient's total ignorance on the subject.

However, despite the best efforts of the doctors, many patients do not understand much of what is said because of shock reaction. This of course implies at least some understanding of what the doctor has said at the outset—enough to give the patient the feeling that the world has fallen down around his ears. It is significant of the fact that most people are essentially reluctant to look at the dark side of things, that most of those who remember enough to tell one what the doctor says remember the minimizing points, sometimes the implication that if they had a private doctor hospitalization would not be necessary or the possibilities implicit in the statement that further tests will be made.

The almost defiant attitude—even when it is smoothed over—on the part of the patient who finds a doctor who tells him hospitalization is not necessary is an indication of the fact that patients connect a more serious condition with the need for hospitalization and that they feel they can tolerate illness and treatment if it is not tied up with loss of freedom and admission of it to the world at large.

While the immediate moment of learning of the diagnosis is a significant time in the sequence of events and often a very good time for an estimate of the patient's reaction and ability to accept the situation, there are many patients with whom it must be recognized that time is of the essence. A patient may have listened politely and agreed bravely with the doctor and nurse in their interpretations of diagnosis and recommendations, but it becomes apparent when an attempt is made to get him to talk instead of to listen that he is so frozen emotionally that any real understanding or any power to decide future plans is entirely blocked.

In this situation, if the patient can gain the impression that this is recognized and is not an unusual reaction, and can be made aware that the desire to help is there to be taken advantage of at a later date, it seems wiser not to prolong the interview. Such a patient may characteristically prefer to lick his wounds privately or may need to share his problem quickly with his family. If the contact, however brief, assures him of acceptance and understanding, he will usually be able to come back with whatever problems they see together in the situation, or if the family fails him. A doctor or nurse is less likely to note this reaction readily as it is part of their training to take the authoritative teaching position in a relationship with a patient with the expectation that the patient will listen and follow.

While social workers are known to be what they like to call "articulate" (or what some of our co-workers unkindly describe as "long-winded") their relationship with patients places an emphasis on drawing out the patient regarding his feelings, worries, needs and problems; and the inarticulate patient, whether naturally reserved or suffering a temporary psychological block, is more quickly recognized.

The apparent reaction to information of diagnosis and its implications is not always the true one and can in fact be very misleading. Sometimes people who seem to accept things well are really hardest hit. Many of us are better actors and acresses than we suspect and minus the stage and footlights many a superb performance goes unrecognized as such. Some of us who have pieced our hearts back together again so many times that we've forgotten what they were like originally may sometimes forget how drastic and dreadfully final the first break was.

Regardless of whether the first reaction is a

shocked numbness or a panicky desire to flee or to become an adversary set to disprove the diagnosis, regardless of whether the blow is cruelly sudden or the final confirmation of long worry and suspicion, the worst is not over that day or week or month. There is yet to come the long drawn out series of disappointments, frustrations and fears added to fears.

It is generally agreed that of all emotions found in tuberculous patients, fear is the most universal. It is difficult to cope with because it is not restricted to a specific fear about which a patient can be definitely reassured. The first fear is likely to be basically the fear of death, though this is usually the last admitted. To many people the telling is something like this: The doctor or clinic staff says, "You have tuberculosis and we think you had better go to the hospital for a while."

The patient thinks: "I'm going to die of tuberculosis. I've always known I have to die some day but now death is near and real. Maybe it won't be soon but I'll die of tuberculosis."

He is told: "It is not too bad now and I'm sure they can help you in the hospital. It may take quite a while but they will do everything possible and you will be much safer."

He thinks: "I have to leave home. I must give up my job. Maybe I'll never be well enough to work again—besides they don't like people around with tuberculosis. I'll have to leave my wife. Maybe she'll be afraid of me. Maybe she'll get tired waiting for half a man to come home and find a real man. She might as well, I guess. I'll be dead anyway and the children will need a father—and money! How'll they get along?"

He is told—"Don't worry about money. The welfare will help you."

He remembers "that life! Hardly enough money for food—begging for clothes—nothing for shows and fun for the kids. Explaining every cent to some one."

The word hospital comes back again and he remembers all the old tales about how people stay for years and years and maybe do nothing but lie in bed or else have pieces cut out of their ribs or needles poked into them. He recalls people who have come home still unable to work or have worked and had to be readmitted. "Can they really cure it?"—is not an unusual question and always there is emphasis on the "really." When the immediate fear for himself passes, a patient goes on to fear of having infected his family, and even this fear cannot be definitely obliterated, as repeat tests have to be continued for such long periods.

For many people—sure of their status at home and with a minimum of a sense of stigma and even perhaps with a degree of financial security or an easy acceptance of public assistance—the greatest fear is of the unknown complications of hospitalization. The belief that they will be required to stay, however unbearable it may be, looms large. (With some people legal restrictions such as are now pending will be a detriment rather than a help and I believe case finding will be less easy). Facing admission to a strange hospital where none of the doctors are known to the patient is frightening, and the fact that no one can say in advance what form of treatment will be used contributes to the fear of the unknown and helps to stimulate the superstitious and vicious tales about using patients for guinea pigs.

Difficult as is the prospect of entering a totally unknown hospital situation there are times when familiarity with it is worse. This happens frequently because of the fact that often more than one member of a family develops tuberculosis. If the first patient dies or has frequent readmissions, the second patient's fear and resistance are naturally exaggerated. It is expecting a great deal to ask a patient who feels reasonably well to enter a hospital for the same care that failed to cure a parent or sibling, who perhaps also felt well, or resisted hospitalization, insisting that he felt fine, until he entered the hospital and finally died. It is not unusual to blame a doctor or hospital for a patient's failure to recover, and it is easy to do so in such a situation. A common way of meeting an unpleasant or frightening situation is to emulate the ostrich, and some people achieve considerable aptitude at this. They can rationalize in a dozen different directions, but the real effort is to escape by not seeing.

The stigma that is associated with tuberculosis is a vicious and discouraging problem. It is present to some extent among nearly all races and nationalities and is found among intelligent and socially prominent people but in Hawaii reaches staggering proportions among the Orientals, particularly the Japanese. It is well known and easily recognized as a block toward the acceptance of hospitalization and yet little is done about it in the right places. The education that comes from "haole" sources may eventually impress itself successfully on the younger generations but the protection and consideration given to people because of this attitude by doctors of their own races is a hindrance. It would seem that if all the doctors set out to educate their patients and parents of patients on this subject, progress might be made,

but instead many "protect" the patients by not naming the diagnosis—not repeating x-rays but judging "cure" by the patient's statements of symptoms and other such evasions of the facts.

The ability of a patient to face the diagnosis and accept the need for hospitalization can be reasonably expected to be an indication of his ability to adjust in the hospital, though the fallibility of this is obvious when we take into consideration our own failures at detecting danger signals and the extreme hardship of prolonged hospitalization. We may in the first place find the patient seemingly understanding and accepting—quoting back to us all the things he knows he is supposed to believe—and not realize that he has no real conception of the implications, or even perhaps that he is harboring some feeling that he will get along better if he appears to agree with us and can figure out some way of escaping later.

Supposing, however, that he starts out with a fair understanding and a willingness to cooperate with treatment; and supposing the strain of indecision likely to be present while a patient is on the waiting list has passed, and he is in the hospital; there are many hurdles still to be met. It must be remembered that the patient's reactions may be deliberately hidden or actually unconscious and even he does not understand his various petty expressions of hostility and resentment. Actually, each new day is a challenge, even though it is so similar to the last that a feeble-minded child could learn the routine. The very repetitiousness alone, the absence of any self-chosen privileges, the necessity of eating by order, sleeping by order, and even scheduling one's excretions by some general time table, can add up to tearing pain to certain types of people. Many people all their lives resist discipline and routine, and many of these are among those placed in this environment of total discipline. The fact that they are simultaneously being encouraged to concentrate on ease, comfort and relaxation increases their awareness of irritations and interference with their personal affairs. Considering this, it is small wonder that we find occasional patients who scream and swear and become insolent to those imposing the restrictions. It is, in fact, surprising that most of them confine their flare-ups to the tiresome but less obnoxious chronic "gripes" about food and other ever-present targets.

Anxieties regarding family situations are extremely common and unfortunately often warranted. We have all known couples who seemed reasonably happy or at least satisfied together so long as nothing happened to separate them but were apparently unable to maintain their relationship through any separation. Many men find it impossible to confine their after work interest to a sick and absent wife and most of them can find excuses for their conduct. Perhaps they are alone and lonely and feeling sure that these little extramarital excursions will not become known to their wives. They assure themselves that they have nothing to do with the love and sympathy they bear their wives. Perhaps they are burdened with care and worry over children with whom they are not prepared to cope single handed.

In either case the patient-wife usually hears or suspects and many times she merely hears tales of other husbands and then begins to suspect her own. While wives seem a little better able to remain faithful, there are always some who are not. The husband-patient may hear rumors about his own wife or another man's or he may be influenced to suspicion by his own feelings of inadequacy. Lying in bed, unable to guide the family destinies as he previously did, unable to give vent to his own sexual desires—or even in weakness noting their absence—suspecting that if he could achieve sexual contact with his wife she might find his weak and infected body repulsive, he is prey to jealousy, resentment and despair. He may be shocked to find that bitterness against his wife flares easily and may be unable to resist the impulse to make selfish demands of her and of the women who surround him as nurses, punishing them all for his helplessness.

The withdrawn patient who habitually resists the impulse to express his resentments may assume an attitude of despair and defeat, welcoming symptoms or findings which will alarm his wife and others, thus exacting attentions which he cannot make himself demand or even welcome openly. A naturally aggressive person is likely to feel more keenly threatened with the need to dominate exaggerated by his apparent helplessness and his fear that he may actually never again assume his old role.

Financial worries carry on into the hospital also when the patient is a husband, knowing that savings are limited or that the family is already publicly dependent. Wives can help this if they can take their tales of woe elsewhere, but many of them are not necessarily unwilling but almost unable to do so.

It must be remembered that the patient is not the only one beset by fears of the unknown future, loss of security and a tendency to resent the advantages of the partner. To a wife who has been very dependent, her husband's safe retreat in the protected environment of a hospital may perhaps be subconsciously envied as compared with her

necessity to struggle with money and food and children's problems and all the threats, both real and intangible, which loom large to a woman suddenly robbed of a dominant husband.

Alfred Ludwig in the *Public Health Reports* of July 2, 1948 says: "It is a cardinal rule never to react emotionally to an emotional outburst. Complaints are either justified and need explaining, or emotional and should be understood." If this attitude could become a part of all staff members in a hospital, many against-medical-advice discharges could be avoided. Even though the doctor or head nurse or social worker may be called on later and may try to pour oil on troubled waters, the damage done by harsh words or a real contest of wills, with a person with whom contact must continue, is almost irreparable.

No doubt many patients are infuriating to the busy, tired employe, and hospitals cannot restrict their hiring to saints, but if intellectual understanding cannot be expected of all, patience, tolerance and human sympathy must be the substitutes.

A question which has interested me is the matter of what correlation may exist between intelligence and successful adjustment to tuberculosis. We often incline to feel that because a patient is intelligent, he sees the need for hospitalization and will, therefore, be able to accept it. However, the reverse is frequently true. We have all known of instances of nurses, social workers, teachers and other professional people who never succeed in making the adjustment. On the other hand, while some of the dull patients are irresponsible, uncooperative and stubborn, others of them become the docile, obedient, so-called "ideal" patients from the point of view of the staff, their very dullness inhibiting any tendency to worry or resistance to authority and regimentation. An attempt to find some opinions on this subject brought out only some elaborate efforts to prove that while tuberculosis does not necessarily create genius, it definitely nourishes the spark. A Dr. Arthur Jacobson is quoted as saying that the decline in the quality of creative writing in America coincides with decline of tuberculosis. He anticipates the "lack of certain cultural joys" as a compensation for good health—seemingly disregarding the possibility that if some other way were found to avoid the too busy and cluttered life, the creative spark might flame as well. Dr. J. Lewis Moorman in "Tuberculosis and Genius" names the many geniuses who have had tuberculosis (Keats, Shelley, Stevenson, Voltaire, Moliere, Francis Thompson, etc.). He indicates that Dr. G. M. Munro (Psycho-Pathology of Tuberculosis) believes that mental faculties are stimulated and quotes him as saying "the patient has an insatiable craving for a full and active life. He lives in an atmosphere of feverish eagerness to seize the fleeting moments before they pass." To our way of thinking this would be the expected reaction of the frightened patient and surely not to be encouraged for the sake of possible genius.

In his "Manual of Tuberculosis" Underwood says that the "mental attitudes of tuberculous patients are really expressions of their methods of adjusting to a new environment." The mental state bears watching in the early sanatorium period after the patient begins to feel well and rested and to become irked by restrictions. At this point, as well as later if he suffers a set back, he is likely to leave in a fit of depression or an attempt at bravado to prove he knows more than the doctors do. It is said that success in the hospital will depend on a combination of all the physical, social, emotional, and temperamental factors, and one writer goes so far as to say that "nearly all patients in prolonged treatment occasionally behave in a manner their friends would not consider normal."

In view of this it is easy to see what a problem the patients are to the staff and how important the psychology of the staff really is. Dr. Francis Marion Pottenger in his book "Tuberculosis" says, "Tuberculosis can be treated successfully by anyone who will study the disease and the patient and apply known measures" but he goes on to say that the psychology of the physician (and this would include other staff members) is a determining factor far more often than might be believed.

"Many of the most serious difficulties are those of a domestic, economic and social nature, and unless these can be solved, recovery will be retarded and may be prevented." It seems indicated to say here that all such problems cannot be solved. Some can only be met and this is the assistance hardest to give. If, for example, a marriage breaks up, we may only be able to help the patient face it since few marriages can be saved when they have actually reached the brink, and when the two people involved are faced with the continued illness of one of them, the favorable odds are at their lowest.

George W. Albee, Psychologist in a Veterans' Administration Mental Hygiene Clinic and Instructor at the University of Pittsburgh, in an article in *The American Review of Tuberculosis* (December 1948) reports on a study entitled Psychological Concomitants of Pulmonary Tuberculosis. Citing several previous studies and opinions on the subject, he points out that there has been no consistent agreement as to what the psychological concomitants are. Nor has there been agreement about whether subjectively or ob-

jectively observed differences are results of disease, predisposing factors, or merely accentuated by stress of illness. Because of this confusion a carefully controlled study of two groups (50 each) of veteran patients in Deshon V.A. Hospital in Pennsylvania was done. One group was composed of active tuberculous patients and the other of non-tuberculous patients with chronic illnesses: demonstrable arthritis, demonstrable ulcer, and severe cardiac disturbances. All possible factors including age and intelligence were correlated and the margin of subjective error eliminated as far as possible, to validate the study. The areas of personality studied (questionnaire called "The Minnesota Multiphasic Personality Inventory") are separated into: Hypochondriasis, Depression, Hysteria, Psychopathy, Masculinity-Femininity, Paranoia, Psychasthenia, Schizophrenia and Mania. The conclusions drawn were:

(1) Chronically ill patients in general deviate in the direction of maladjustment on each of the scales mentioned.

(2) The tuberculous patients were found to be significantly more hypomanic and more feminine than other chronically ill patients. The first is explained on the basis of the theory that absence of symptoms—enforced rest—nutritious diet and isolation from recreation combine to produce a psychological drive to activity and frustration of this results in hyperexcitability or so-called euphoria. The second is thought to be because tuberculous patients generally receive more nursing and medical attention than the others.

(3) The non-tuberculous patients were found to be more depressed and more hypochondriacal than the tuberculous, and this appears to tie in with the opposite aspects of the above factors.

(4) No linear relationship between degree of emotional deviation and severity of tuberculous infection was found to exist in the present data.

We cannot ignore two adjustments to tuberculosis which are not unusual and not without danger. The first of these involves the psychoneurotic casualties of tuberculosis. We have all heard the maxim that rehabilitation begins at diagnosis and have all seen patients coddled and frightened into permanent invalidism with even a minimal infection. This type of patient can usually be recognized early and there should be a conspiracy among all staff members to reassure him regarding cure at every opportunity and to divert his attention from himself and his symptoms.

Psychoneurotic tendencies may be quite well established prior to diagnosis, and coping with them is a real challenge. Despite the best efforts of all concerned there will remain some of these casualties, though some would have been so even if they had never had tuberculosis and had had to depend on dizzy spells and gastric disturbances for sympathy and for the means of avoiding harsh reality. The second is that of patients who adjust by simply refusing to accept the limitations imposed. These people may "accept the diagnosis" in the sense that they do not try to deny it even to themselves—following precautions and attempting some slight degree of cooperation. However, with a reaction created by previous contact with the disease, deaths in the family, and unhappy and unsuccessful efforts at their own cure leading to a conviction that cure is hopeless, combined with a high strung, independent personality, it is possible to reach a real impasse.

If it seems clear that forcing hospitalization will lead to an emotional breakdown, there is nothing to be gained provided the patient protects others. There really are people who would rather die "with their boots on" next month than live in bed for a year or five or ten, and this attitude defeats cure even with the patient in bed.

Janet Thornton in "The Social Component in Medical Care" expresses a thought relative to tuberculous patients, though she is actually discussing a cardiac case. "Medical experience predicts continuance of life in terms of years, not weeks or months, for one thus stricken . . . To look into those years, to choose desirable ends toward which one's failing powers shall be directed, and to persist wisely in the endeavor to achieve those ends challenges ability and courage as do few other occasions in life."

LOOKING AHEAD WITH BOARDS OF NURSE EXAMINERS

VIRGINIA A. JONES*

The conference of secretaries of state boards of nurse examiners held in Akron, Ohio, April 28 and 29, was preceded by a work conference for study of what the implications of the Brown Report mean to state boards of nurse examiners and for legislation regulating nursing.

The representatives from 43 states and from Hawaii and the District of Columbia divided into the following six groups for study:

1. National accrediting of schools of nursing.
2. Degree programs in nursing.
3. Programs of study for the graduate bedside nurse.
4. Programs for the practical nurse.
5. The differentiation of nursing service according to function and the future role of the professional nurse.
6. Legislation affecting all nurses.

These groups made recommendations which were discussed, revised, and approved by the conference as a whole. Summarized excerpts of the recommendations follow. Detailed copies for all state and district associations and Leagues will be provided later by the American Nurses' Association.

The group agreed that when it is feasible, state

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boards of nurse examiners should relinquish their accrediting function to state educational agencies or national agencies set up specifically for that purpose. This agreement was reached on the basis of the fact that the National Nursing Accrediting Service, now being organized to take over the accrediting functions of the National League of Nursing Education, the National Organization for Public Health Nursing, and the Association of Collegiate Schools of Nursing, would be functioning soon. Also, universities and colleges in which collegiate programs will be developed will be accredited by educational agencies set up for this purpose.

In a profession with such important new developments, the problem of providing adequate leadership is always urgent. Therefore, it was recommended that in all plans developed on a national basis, including federal legislation, the preparation of leaders should be given adequate priority.

Nursing education stands in need of widespread experimentation. But requirements for licensure of nurses are generally not sufficiently flexible to permit of the essential experimentation. Collegiate schools of nursing cannot afford to inaugurate experimental programs and thus jeopardize the acceptance of their graduates by state boards of nurse examiners. Therefore, it was recommended that state boards of nurse examiners accept students for examination from schools where carefully controlled experimentation is going on even though their curriculum requirements differ from those set up by the state board. In some states this may necessitate some changes in the state law. In Hawaii such provision could be made through Board regulations.

The role of the state boards of nurse examiners is to guide adjustments in programs of basic non-collegiate schools of nursing and to clarify and improve the status of the graduate bedside nurse to help meet society's needs for nursing.

The following steps need to be taken: 1. Strengthen the better non-collegiate schools of nursing by encouraging centralization of facilities, evaluation of their own programs and facilities, and the expansion of use of local and regional community resources. 2. Recommend affiliation programs only in certain institutions and the closing of poor schools. 3. Develop in-service programs for the graduate bedside nurse and aid state and local professional nursing organizations to sponsor institutes and workshops for these nurses. Employers should be urged to allow time and to provide for such participation.

The group studying practical nurse education made recommendations regarding preparation and control of practical nurses most of which are already being practised in Hawaii. Emphasis was placed on the need to "project the concept of practical nursing favorably in the minds of candidates for this field and in the minds of vocational guidance counsellors, parents, and prospective employers of practical nurses."

The group studying the future role of the professional nurse and the differentiation of nursing service according to function made the following report:

"In considering the role of the professional nurse of the future, it is necessary to consider first the ultimate goal in the provision of the kinds and quantity of nursing service that the community needs. These needs seem to fall in three groups:

1. The nurse who meets requirements for professional practice.
2. The nurse who is technically trained.
3. The aide or auxiliary worker who assists the nurse and would be trained by the employing agency.

It is agreed that the functions of each group would be centered around the following:

1. *The Professional Nurse*—

a. Performing those services, in a wide variety of circumstances, which require a high degree of technical skill and involving the use of judgment.

b. Identifying the nursing problems and guiding and coordinating the services of others into a plan of care for the patient whether in the hospitals or the home.

c. Supervising the nursing care of the patient in the hospitals and pre-planning the home care involving utilization of family and community resources.

d. Teaching the patient and others associated with him to anticipate the problems related to the care of the patient; teaching the patient and others associated with him how to give the necessary care.

e. Serving as a member of the health team in developing a community health program.

f. Participating vigorously in the improvement of nursing practice and the profession of nursing through research, experimental programs and studies, through organizational activities and attendance at conferences, and through sharing in a public relations program.

Certain professional nurses, building on the universal professional nursing functions, are eligible for specialization as administrators of nursing service, either in hospitals or in community health agencies, as personnel for educational programs and as consultants in special areas; for all of these functions additional preparation is essential.

2. *The Technical Nurse*—

a. Performing general nursing services under the supervision of the professional nurse or the medical practitioner, requiring the technical skills for which she has had preparation.

b. Sharing in planning a program of care for the patient and carrying out her share of the plan. In situations where she is not giving service under the direction of a professional nurse, the physician should assume the responsibility for making or approving a plan of care.

3. *The Nursing Aide—*

a. Performing, under the direction of a licensed physician or a registered nurse, a limited number of the simpler personal services for which she has been trained by the employing agency.

b. Caring for the patients' belongings and sharing in the maintenance of the environmental conditions which contribute to the comfort of the patient.

c. Assisting professional personnel with nursing services.

d. Sharing in planning a program of care for the patient and in carrying out her share of the plan.

Since it is the function of the state board to work toward attainment of the most adequate training standards possible in relation to the factors which affect supply and demand, we recognize that it is the responsibility of the state board:

1. To exert every effort possible to influence the establishment of collegiate schools for the education of professional nurses to provide that state or region with the needed professional personnel.

2. To forward a functioning program for accrediting schools on a national basis and to work toward the utilization of national standards in the accrediting of schools for state recognition.

3. To encourage experimentation in the preparation of both professional and technical nurses, exerting every effort to liberalize existing laws and regulations.

4. To establish machinery making it possible for the technical nurse and the present graduate nurse to progress to professional nurse status.

5. To encourage schools of practical nursing now established (or being established in the future) to develop on a basis which would facilitate transition to a program of technical preparation.

6. To discourage the establishment of these programs on anything less than post high school level and to explore the possible centers in each state where such centers could be established.

Some of the recommendations to improve the program for legislative action in nursing were as follows:

1. Periodic reports from the state boards of nurse examiners should be made to the state nurses associations on administrative difficulties in laws which indicate the need for revision.

2. The state nurses associations' legislative committees should work more closely with the state boards of nurse examiners in planning, initiating, and promoting legislation by placing board representatives on the state nurses associations' legislative committees.

3. Rather than depend on volunteer workers, competent persons including state nurses associations staff, legal counsel, and lobbyists should be employed to devote major time to legislation.

4. Effort should be made to obtain support from the large number of registered nurses outside the state nurses associations who voice opinions and are influential in the area of legislation.

MAUI NURSES ASSOCIATION

MARILYN ESTILL, R.N.

Miss Aileene MacHenry, a member of the Public Health Department working in the Makawao District, returned to New York in May.

Miss Elizabeth Sheridan of Kula Sanatorium spent June and July traveling with her family in Northern United States and Canada.

Miss Barbara Elrod, Providence Hospital School of Nursing, Oakland, California, has joined the staff of Kula Sanatorium.

Miss Neva Havens, Paia Hospital, has returned to her home in Aberdeen, Washington.

Miss Judy Solem, Monroe, Minnesota, has returned to the staff of Paia Hospital after an absence of four years.

Miss Lucille Sandberg of California has joined the Public Health Department Staff to work at Lanai City.

REPORT ON SOCIO-ECONOMIC CONFERENCE FOR INDUSTRIAL NURSES

LOIS BELL, R.N.*

A broad program of action to improve professional nursing service in the industrial field and to raise the economic standards of industrial nurses was considered at the Socio-Economic Conference for Industrial Nurses held in New York March 15-19 under the auspices of the American Nurses' Association.

Great emphasis was made repeatedly upon the need for a strong state organization with a public relations program under the direction of recognized specialists.

At the annual convention of the American Association of Industrial Nurses held in Detroit from April 5 to 9, many joint sessions were held with the American Association of Industrial Physicians and Dentists and promotion of the health program in industry was the theme.

E. Patterson Morris, former president of the Honolulu Industrial Nurse section, was elected second vice president of the National organization at this meeting.

ANNUAL CONVENTION

Don't forget the dates of the annual convention of the Nurses' Association, Territory of Hawaii—September 14, 15 and 16. A preliminary meeting, open to the public will be held the evening of September 13.

* President of the Hawaii Industrial Nurse Section.

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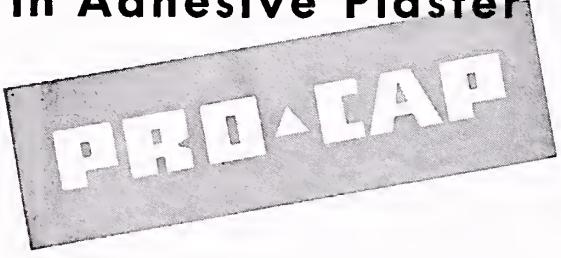
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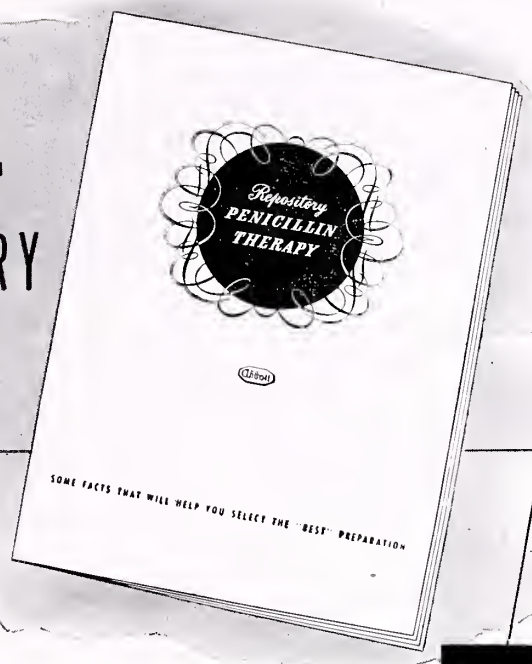
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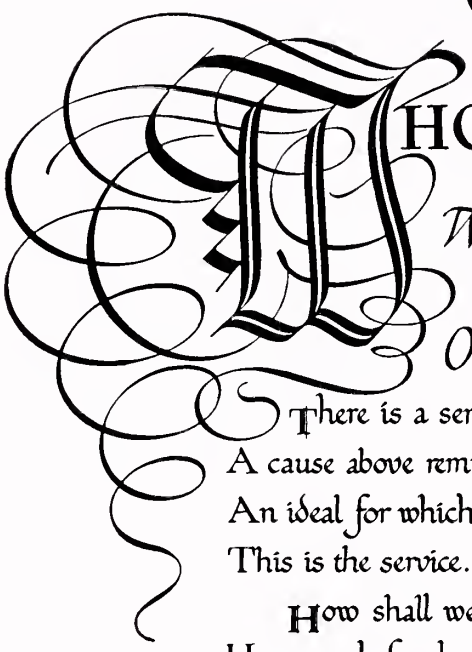
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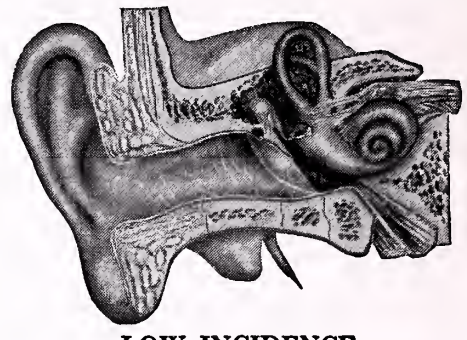
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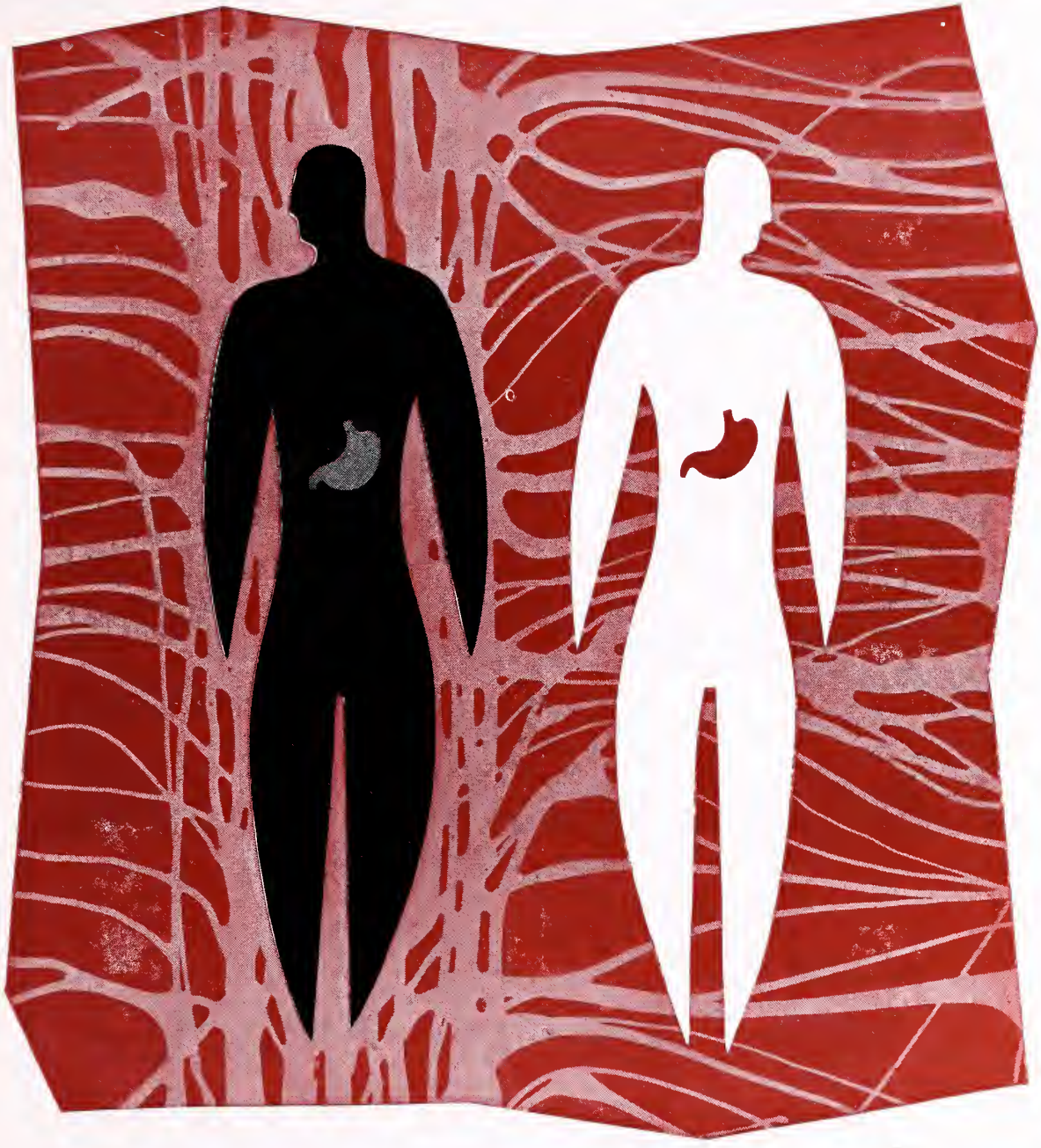
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2. Heat until almost boiling and stir in Dextri-Maltose.
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THE N.Y. ACADEMY OF MEDICINE
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research which is self-endowed



As commerce strives, advancement is spurred, for competition demands new and better products. This incentive requires reinvestment of a large portion of earnings in searching for improvement. Self-endowed research in the pharmaceutical industry affords more powerful weapons for medicine's war on disease and pain. Antianemia products, the commercial development of Insulin, and superior sedatives, antiseptics, antihistaminics, and antibiotics are but a few examples. Such medical discoveries as these continue to flow from the Lilly Research Laboratories as a result of the American economic system.

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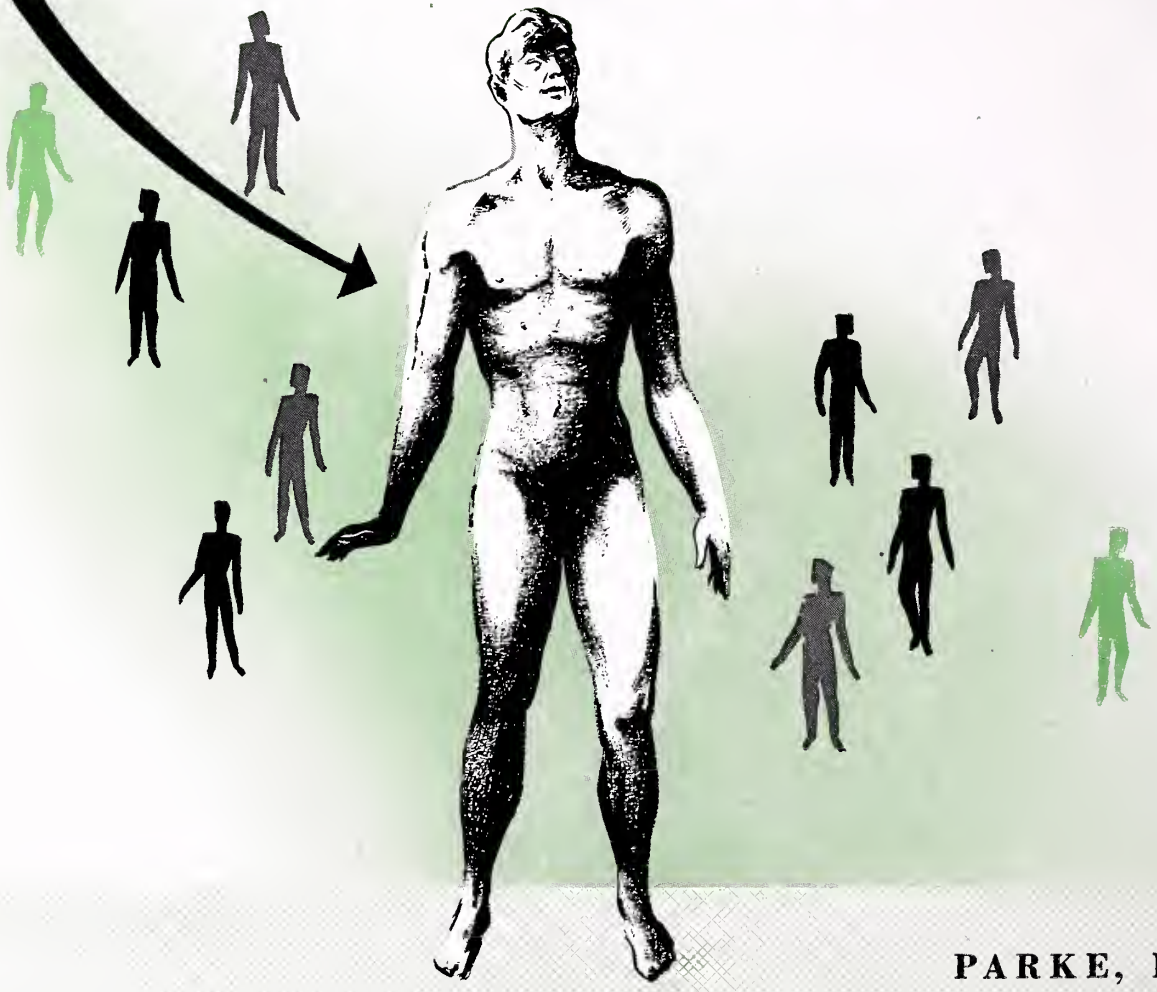
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criteria in syphilotherapy

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long-term study

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large series of patients

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satisfactory

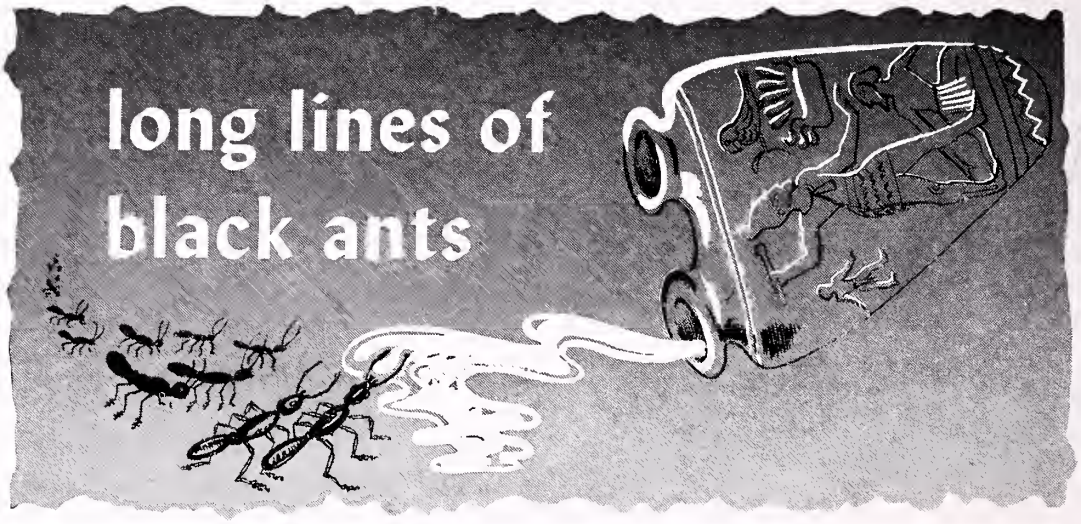
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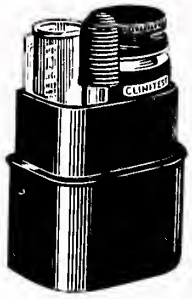
*Cecil, R. A.: A Textbook of Medicine. Philadelphia, W. B. Saunders Co., 1947, p. 376.

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R.U.Q.

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Ovaltine

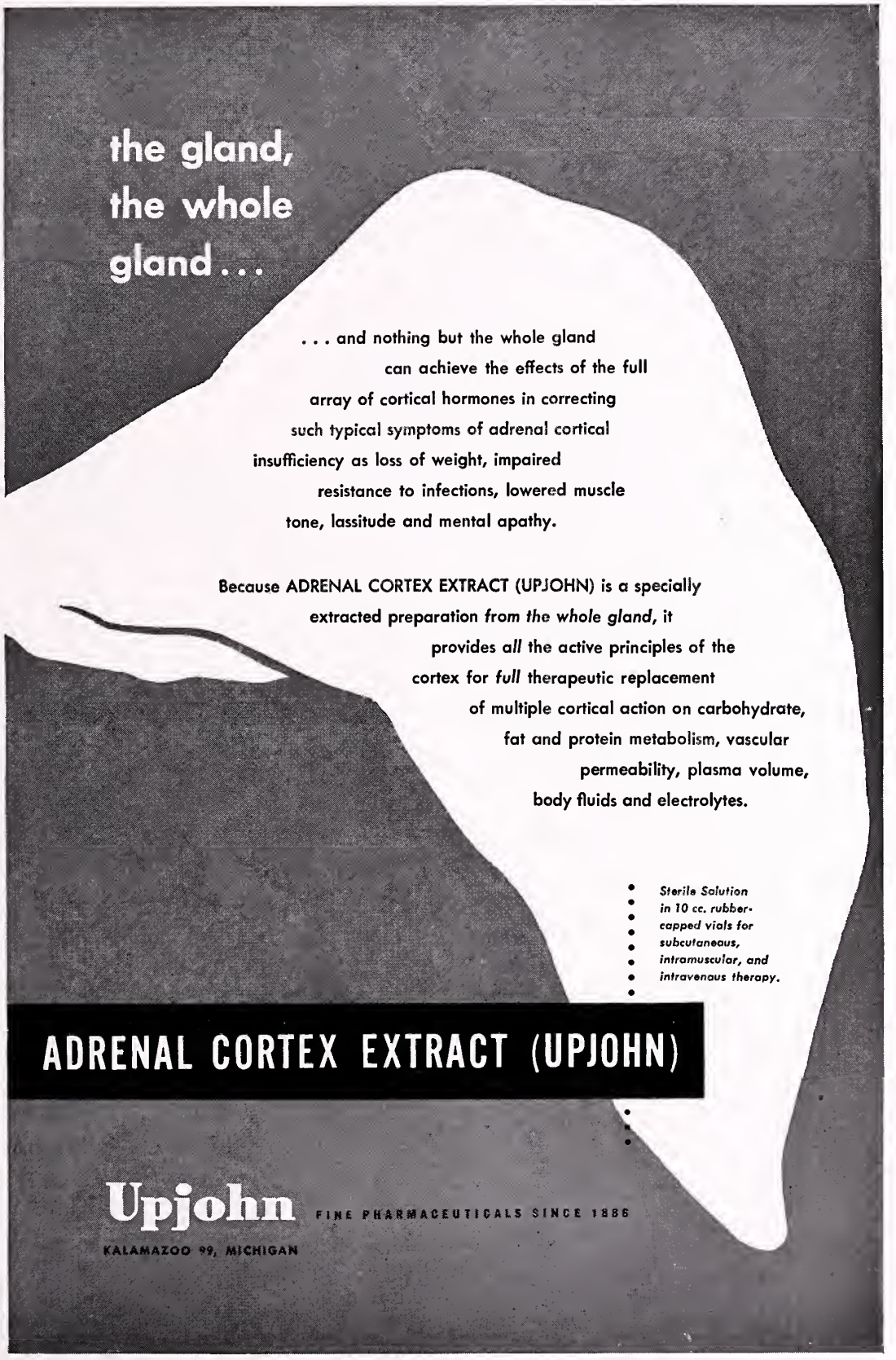
Three servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 oz. of whole milk,* provide:

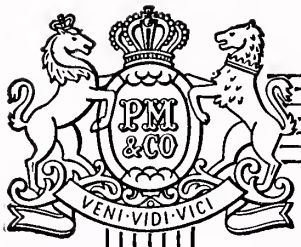
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PROTEIN	32 Gm.	VITAMIN B_1	1.16 mg.
FAT	32 Gm.	RIBOFLAVIN	2.0 mg.
CARBOHYORATE	65 Gm.	NIACIN	6.8 mg.
CALCIUM	1.12 Gm.	VITAMIN C	30.0 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN O	417 I.U.
IRON	12 mg.	COPPER	0.5 mg.

*Based on average reported values for milk.

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can achieve the effects of the full
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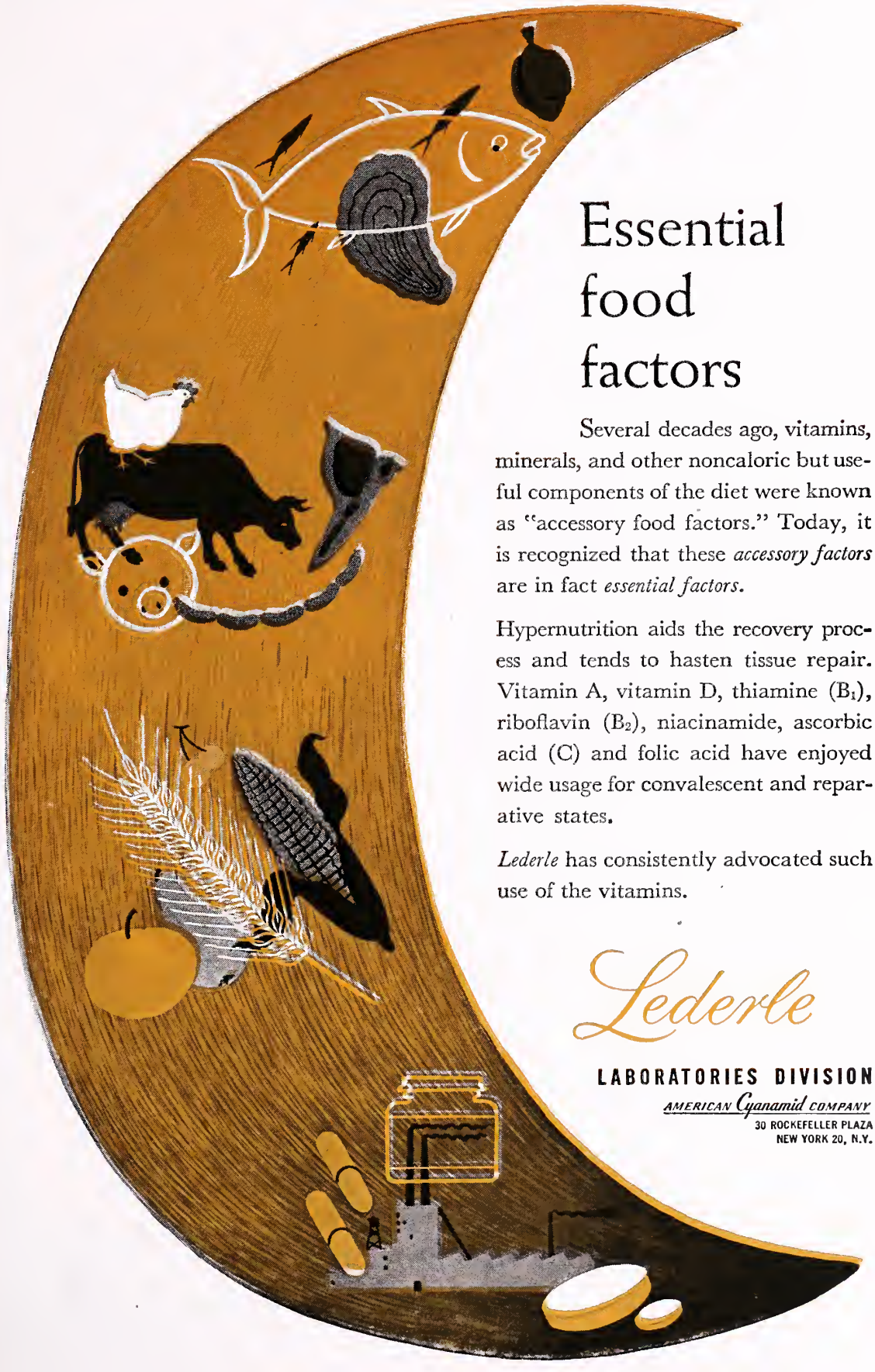
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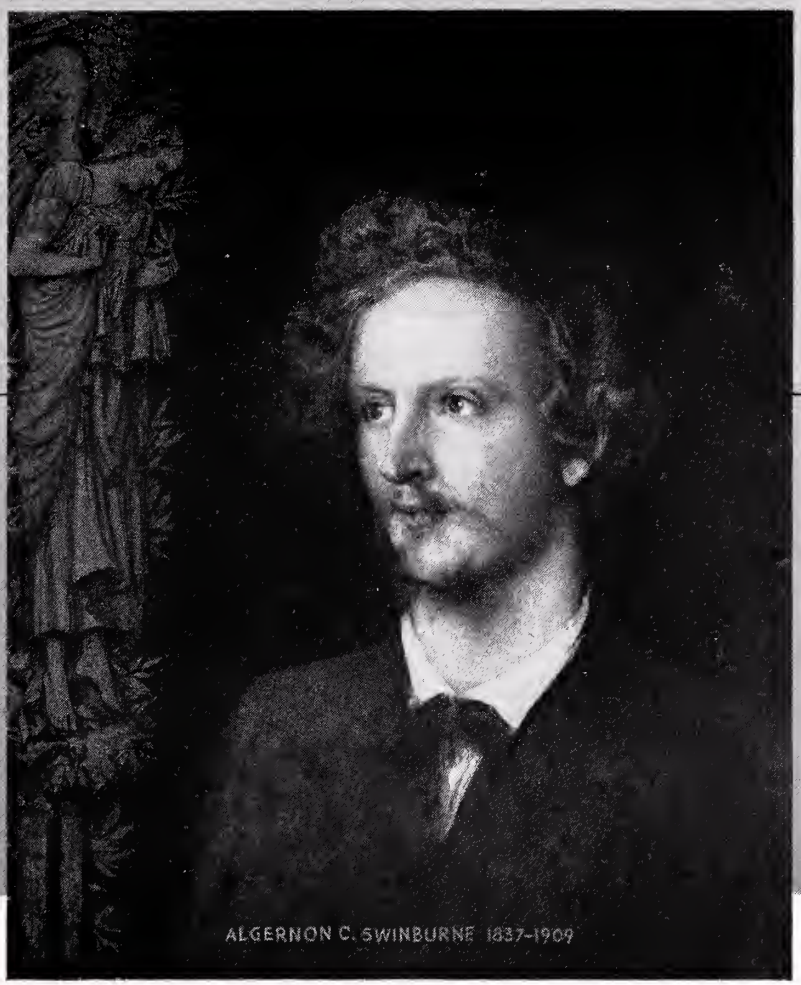
This first evaporated milk was made by Pet Milk Company. It has been the constant purpose of this company to produce evaporated milk that would make the greatest possible contribution to the nutritional welfare of the nation—especially its babies. This long experience has ripened knowledge and skill as to methods of processing and control that preserve the unique food values of milk.

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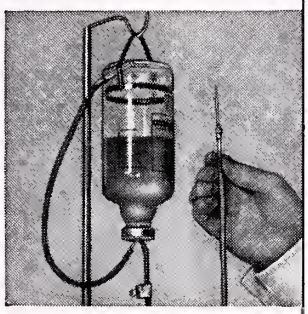
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NUMBER 1

SEPTEMBER-OCTOBER, 1949

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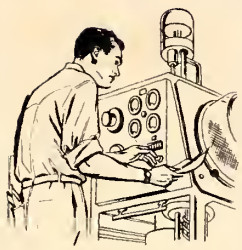


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DIAGNOSIS: PNEUMONIA





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H. E. BOWLES, M.D., AND C. A. DOMZALSKI, JR., M.D.
HONOLULU

THE TWO great purposes of the art of medicine are to save life, and to relieve pain and suffering. Any situation wherein a physician not only witnesses death, but is called upon to cause it, must be doubly distasteful to him. A therapeutic abortion is such a situation. It is really an admission of failure on our part to control disease and remove its threat to the life of the mother. It is a grim and disheartening task.

Any improvement in therapy which permits us to avoid destroying fetal life must be considered a signal triumph over disease, just as dramatic and inspiring as the more spectacular advances in chemotherapy of infectious diseases. Such an advance in our ability to control tuberculosis has occurred, but because it has been slow and unpublicized, it has escaped the attention it deserves.

It is the purpose of this review of the past ten years' literature to focus attention on this somewhat neglected aspect of the advance in our fight against tuberculosis.

Ten years ago one of us (H.E.B.) reviewed the problem of pregnancy in pulmonary tuberculosis.[8] At that time a growing trend toward conservatism in the use of therapeutic abortion was delineated.

During the nineteenth century the pendulum of medical opinion swung away from the extreme optimism expressed in the traditional dictum of Hippocrates and Galen that "pregnancy is the best cure for consumption." The era of optimism was followed by a century of equally extreme and equally erroneous pessimism which considered pregnancy a major catastrophe in the course of pulmonary tuberculosis. After 1920 the pendulum began gradually to come to rest in the neutral position. Clinicians began to think that pregnancy probably had no effect on the disease. Objective proof for this belief slowly materialized. Comparisons of the course of pulmonary tuberculosis in pregnant and non-pregnant women by Bridgman and Norwood[9] in 1926, Barnes and Barnes[3] in 1930, and Ornstein and Kovnat[39] in 1935 showed that pregnancy had no effect on tuberculosis which could be detected from the morbidity and mortality rates in the two groups of women.

The influence of pregnancy on the course of pulmonary tuberculosis was first studied in animals in 1907 by Herman and Hartl[23] who reported that 71 per cent of their tuberculous guinea pigs were adversely affected by pregnancy. Norris[37] repeated this work nine years later with the same results. However, Müller,[36] in 1923, concluded that pregnancy had a favorable effect on pulmonary tuberculosis in guinea pigs. The middle-of-the-road opinion was first reached by Bogen[7] in 1932, who found that pregnancy had no effect on tuberculosis in guinea pigs. Schmidt-Lange[44] used both guinea pigs and white mice in 1936, and found no evidence that pregnancy had any deleterious effect on pulmonary tuberculosis. The same conclusion was reached by Skillen and Bogen[46] in 1938. In 1940 Burk[10] reported that pregnancy had no effect on either human or bovine tuberculosis in rabbits. Wade,[50] in 1942, found that the duration of life was slightly longer and the extent of tuberculosis was somewhat less in tuberculous rabbits who had from one to three pregnancies than in those which did not become pregnant.

Briefly, every investigator since 1916 has consistently found that pregnancy has no harmful effects on tuberculosis in any of the animals studied.

Skillen and Bogen[46] also submitted an analysis of results in 50 pregnant tuberculous women, 14 of whom were allowed to go to term. At the end of a three-year follow-up period the 3 patients with minimal lesions were alive, and so were the 11 women with moderately advanced tuberculosis, with the exception of one who died—soon after being aborted. Of the 36 women with far advanced lesions, 6 died after term delivery and 10 died after being aborted. The fatality rate was 8 per cent a year for those delivered at term, and 7 per cent a year for those whose pregnancy was interrupted, and neither rate was higher than that for the general sanatorium population. Fifty other patients became pregnant after leaving the institution, and most went to term. Only 2 patients died,

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and they were in the group of 10 with far-advanced tuberculosis. These authors observed that the tuberculous woman who becomes pregnant has a course not greatly different, so far as her tuberculosis is concerned, from her tuberculous sister who does not become pregnant. They were of the opinion that "The direct physiologic effect of pregnancy, parturition and lactation may actually represent a minor aspect of the real problem. A new child may mean a lack of rest and the financial drain may deprive the mother of adequate food and medical care. Adequate economic aid, however, may often safeguard the mother even better than interference with pregnancy."

Ornstein and Epstein[38] (1939) published the results of a second study at Sea View Sanatorium on the influence of pregnancy on tuberculosis. In comparison with the earlier findings of Ornstein and Kovnat[39] at Sea View that the death rate in 85 pregnant women was 36 per cent as compared to 33 per cent for all women in the Sanatorium, Ornstein and Epstein found a death rate of only 12 per cent in their series of 82 pregnant women. The reduction of the death rate was attributed to the collapse therapy used in the second series of patients. All the deaths in both series occurred in patients with caseous pneumonic tuberculosis, and the conclusion of both studies was that it was the type and management of the tuberculosis which determined the outcome. They felt that pregnancy had no discernible influence on the prognosis. They[38] also described 12 cases wherein pregnancy occurred after thoracoplasty had been done. None of these women had a reactivation of her disease.

Not content with a practical demonstration that pregnancy has no deleterious effect on pulmonary tuberculosis, Ornstein and Epstein further maintained that all the theories as to why pregnancy is bad for pulmonary tuberculosis, such as the rise during pregnancy and sudden fall after delivery of the diaphragm, increased metabolic requirements of the pregnant woman, increased blood cholesterol of pregnancy, the alleged decrease in lipolytic ferments in the blood in pregnancy, the demineralization of the body during pregnancy, and the increased proteolytic ferments in the blood of the pregnant woman, are all based on hypothesis and lack any serious clinical or experimental proof. We must confess that in our search for material on this subject covering the past ten years no proof for any of these theories was uncovered.

A third report from Sea View Sanatorium on this problem appeared a year later. Schaefer and Law[43] noted a further reduction in the mortality rate for pregnant women to 7 per cent as compared with 36 per cent for the first, and 12 per cent for the second series. With respect to laryngeal tuberculosis, which most authors considered an indication for therapeutic abortion, these workers pointed out that the poor prognosis is due to the severe pulmonary tuberculosis which as a rule accompanies laryngeal tuberculosis. They cited Fink[20] who collected 360 cases of pregnancy complicated by tuberculosis of the larynx. Of the 75 women who recovered, 33 recovered after abortion and 42 after full-term delivery. Schaefer and Law believed that in well-controlled cases abortion does not improve the tuberculosis and may even be harmful, whereas in far-advanced pulmonary tuberculosis nothing is to be gained by abortion.

Earlier in 1940, Seeley, Siddall and Balzer[45] reviewed the histories of 31 women with thoracoplasties who were subsequently delivered of 34 children. One woman died, 5 had reactivation of their disease, and 25 remained stable. These authors considered such results truly remarkable in view of the fact that thoracoplasty is usually done only in patients with advanced disease who have shown little or no response to more conservative treatment. Thoracoplasty was done during pregnancy in 4 patients, without incident.

In our review of the literature, only two authors were encountered who still favored the use of therapeutic abortion in pulmonary tuberculosis. Potter,[41] of the Obstetrical Department of the Millard Fillmore Hospital, Buffalo, stated, "It is my belief and my practice that if the tuberculous process is reactivated before the fifth month abortion should be induced. In the late months of pregnancy, however, nonintervention should be the rule, as the risk of delivery is no greater than [that of] a therapeutic abortion." He also made the statement that "Everyone is pretty well agreed that matrimony in the presence of active pulmonary tuberculosis should be forbidden, for it aggravates the disease, may infect the husband, and propagates tuberculous children." No matter how malignant and morbid a condition matrimony may at times seem, no one has yet brought forth any real proof of the grave charges he levels against it. There is, moreover, abundant proof in the literature that the children of tuberculous mothers are *not* tuberculous. Trans-placental infection of the fetus is so rare that it is no longer considered a factor in the decisions regarding management of the tuberculous pregnant woman. Newborn infants removed from their tuberculous mothers show no higher incidence of acquired tuberculosis than children born of healthy mothers. The next-to-opening statement of Potter's article, "As the growth of the uterus continues—excur-

sion of the diaphragm is decreased — and the breathing becomes more costal" is a myth which was first exploded by Heynemann[24] as long ago as 1913, again by Klaften and Palugyay[29] in 1926, and was definitively laid to rest by McGinty[33] in 1938. By means of meticulous X-ray measurements, these workers showed that although the diaphragm is elevated during pregnancy, its excursion measured in centimeters is identical to that found in the same women after delivery, both during quiet respiration and during forced breathing.

The second article which advocated therapeutic abortion suffered like the first one from a complete absence of bibliography in support of the author's contentions. Meixner,[34] in 1942, made the following statements:

(1) "No one has shown definitely that pregnancy is good for the health of a tuberculous woman in any type or stage of tuberculosis." Such a statement is totally incomprehensible in the light of the universal view that pregnancy can be legally terminated only when it imperils the life or health of the mother. In no instance is it required that pregnancy prove to be a definite boon to the mother in order for it to be tolerated. Only chaos could result under such conditions, for no one has shown definitely that pregnancy is good for the health of the woman with flat feet, dandruff, or for that matter the normal woman.

(2) "Most investigators, easily 75 per cent, believe that pregnancy can or does aggravate tuberculosis."

We regret that no references accompanied this article either in 1942 or in its 1945 reappearance,[35] for we were not able to find a single publication by any of the 75 per cent of "investigators" who believed that pregnancy harmed the tuberculous woman.

Baker and Ward[2] reported in 1942 on 11 patients with pulmonary tuberculosis who were delivered during the preceding seven years at the Belmont Hospital in Worcester, Massachusetts. Six patients had moderately advanced disease and 5 were far advanced. None had a therapeutic abortion, and none experienced a reactivation of her disease. All had some form of collapse therapy and all were living at the time of the report. All the children were also alive and well. These investigators thought that "Collapse therapy, preferably pneumothorax, should be instituted when possible and should never be discontinued during pregnancy. In active pulmonary tuberculosis, it is much more effective than therapeutic abortion."

One of the most widely quoted studies is that of Mariette, Larson and Litzenberg[31] from the Glen Lake Sanatorium associated with the University of Minnesota Medical School. Since 1921 abortion has been advised at that institution in only 1 case of pulmonary tuberculosis. In the sixteen years from 1924 to 1940 they found that only 8 per cent of the 64 women who had full term deliveries were dead at discharge, whereas 20 per cent of all the non-pregnant women were dead at discharge. Of the 13 women who had thoracoplasty and became pregnant after discharge, 12 were living and well, as were the 19 children they had borne. These investigators were of the opinion that when tuberculosis is properly treated, pregnancy does not adversely affect the disease, and that tuberculosis per se does not necessarily constitute an indication for therapeutic abortion.

Hull[26] summarized in 1944 the results at the Louisiana State University Tuberculosis Unit, where no pregnancies had been interrupted during the entire nine years that that institution had been in existence. Of the 29 women who bore children after admission for pulmonary tuberculosis, one patient, who had had far advanced bilateral disease on admission, died. On the basis of this low mortality rate (4 per cent), Hull concluded that pregnancy has no influence upon the development and course of tuberculosis.

Cutler[17] in the same year presented a detailed study of 26 private patients who had 48 pregnancies following collapse therapy. Seven patients became worse during or after pregnancy, but there was no control series for comparison. Although he regarded pregnancy as a potential hazard to a tuberculous woman, from this experience Cutler concluded that pneumothorax therapy may be considered an alternative to therapeutic abortion.

Chest fluorograms have been an integral part of the prenatal examination at the University of Pennsylvania Medical School since April, 1943. Clinically significant tuberculosis was found in 1.5 per cent of the first 2,000 patients thus examined. Cooper[15] compared these findings with those of several other similar surveys and concluded that tuberculosis occurred no more frequently in pregnant than in non-pregnant women in this age group. None of the 31 pregnant patients who were found to have tuberculosis was subjected to abortion, although several had cavities and positive sputum. The results of treatment in this series confirmed Cooper's opinion that the prognosis of tuberculosis in pregnancy is more dependent on the control of the tuberculosis than on the associated pregnancy.

Calov,[11] in 1946, analyzed the records of 150 women who attended a tuberculosis clinic in Sydney. Two-thirds of the women had active dis-

ease, and in both inactive and active he was unable to discover any difference between those women who had one or more pregnancies and those who had not. If anything, the end results were better in those who bore children.

Cohen[13] presented a convincing study of the fate of 177 tuberculous women who were delivered in the maternity unit of the Black Notley Sanatorium in England from 1937 to 1945. Portions of this series were the subject of earlier communications[12, 14]. Only 23 patients (13 per cent) showed retrogression within three months of delivery. He followed 120 patients for periods ranging from six months to four years, and the late results closely paralleled the early results. Cohen was convinced that in the great majority of his patients "pregnancy was little more than an important incident in the course of their illness."

An interesting analysis of a series of 82 tuberculous women delivered at the Woman's Hospital in Sydney, was presented by Hughes[25] in 1946. Of the 36 women allowed to go to term, 11, or 30 per cent, died. Of the 46 women aborted, 14, or 30 per cent, died. He further divided the patients into those who had severe lesions (those with positive sputum, bilateral involvement, or miliary tuberculosis) and those with mild disease, and again found that identical results were obtained by abortion and by full term delivery. Hughes drew the inescapable inference that since the gross death rates are identical among those allowed to go to term and those whose pregnancies are terminated, there is little to be gained by termination of pregnancy. This study led Hughes to a complete reversal of his earlier practice of aborting all pregnant tuberculous women before the end of the first trimester.

A comprehensive review of the literature on the problem of pregnancy and pulmonary tuberculosis was presented by Friedman and Garber[21] in 1946. Summarizing the writings of 47 authors, they concluded that today the prevailing opinion among leading clinicians is that pregnancy exerts little or no effect upon the incidence and course of pulmonary tuberculosis. In regard to therapeutic abortion the consensus of opinion is that it is never indicated after the first trimester of pregnancy. "On rare occasions, in the presence of a rapidly advancing caseous-pneumonic disease a therapeutic abortion may be undertaken during the first trimester of pregnancy, but the benefits to be derived from this procedure are unproved and equivocal."

In the face of the growing avalanche of statistical studies which repeatedly show that pregnant tuberculous patients fare no better after therapeutic abortion than after term delivery, some writers have insisted that it is not possible to obtain an adequate series of controls for valid comparison. The perfect answer to this challenge was the recent study by Stewart and Simmonds[48] at the Middlesex Sanatorium in England. They compared 216 pregnant tuberculous women with a meticulously assembled control series of 259 non-pregnant women. The two groups were compared on the basis of (1) age composition, (2) social class, (3) previous pregnancies, (4) duration of disease, and (5) activity or quiescence of the disease. Comparison of the two groups was found to be statistically valid on each count by the use of the chi square test. In the patients with active disease 35 per cent of those aborted improved. Exactly the same percentage improved among those allowed to go to term, and in those who did not become pregnant at all. Similar results were obtained in patients with quiescent disease: there were no deaths, and the percentage who remained stationary was 92 per cent in those aborted, 90 per cent in those delivered, and 88 per cent in those who were not pregnant. With unshakeable British restraint, these authors drew the incredibly guarded conclusion that "pessimism as to the influence which pregnancy has on tuberculosis and undue zeal in the termination of pregnancy are to be avoided." They warned that it becomes incumbent upon those who advise termination of pregnancy as an almost routine procedure to establish its necessity in each patient, rather than to assume that it is of obvious and universal value.

Late in 1947 Barone *et al.*[4] analyzed eleven years' experience at the University of Pittsburgh in the management of tuberculous pregnant women. Follow-up records were available for periods of 5 to 15 years on 62 patients. The mortality for patients delivered at term was 19 per cent, for those delivered by caesarean section 36 per cent, and those aborted in the first trimester 39 per cent. The series was further broken down into groups according to the extent of the tuberculosis, and the results in each group were so similar to the above quoted figures that the authors concluded that the best results were obtained in those patients who were delivered spontaneously, regardless of the extent of the tuberculosis.

In the same year Jameson[28] collected from the literature 66 pregnancies following thoracoplasty, 8 of which were artificially terminated. He stated that the results in the 58 delivered at term "warrant the statement that pregnancy following an

effective thoracoplasty carries no more risk than that occurring in any arrested case of tuberculosis."

A recent report[1] from the San Salvador Hospital in Santiago, Chile, contrasts the results obtained in 43 pregnant tuberculous women who were delivered at term with the results in 31 similar patients who were aborted. Among those delivered at term 72 per cent improved or remained stationary, while only 58 per cent were the same or better in the group whose pregnancies were interrupted.

Bluhm[6] briefed the records of 121 tuberculous pregnant women treated at the Central Dispensary in Stockholm. All but 6 women remained stable throughout pregnancy and the puerperium. One patient with a thoracoplasty went through 4 pregnancies uneventfully.

The trend among phthisiologists toward conservatism in the use of therapeutic abortion is confirmed in the more recent expressions of the leading authorities in obstetrics. In the sixth edition of his textbook (in 1933) De Lee[18] said, "Most obstetricians think pregnancy aggravates the disease, and internists disagree among themselves." But in his eighth edition[19] (in 1943) he wrote, "If the patient with active tuberculosis becomes pregnant, abortion is not indicated. Proper care will enable the patient to go through her pregnancy unharmed."

Beck[5] in his third edition (1942) said that, in view of the recent improvements in tuberculosis therapy, abortion is rarely necessary, especially if proper treatment is available. Stander[47] and Titus[49] listed tuberculosis as a disease which is not an absolute indication for abortion, although it may be considered in patients with very active disease in the first trimester. Greenhill[22] concurred in a recent editorial: "Interruption of pregnancy because of tuberculosis is rarely indicated, and then only during the first three months. Most women with tuberculosis are not harmed by their gestation, provided they have proper care." Cosgrove[16] did not admit tuberculosis as an indication for abortion. He was convinced that the tuberculous patient susceptible of arrest can stand pregnancy, and, "she who will not arrest will not be seriously accelerated in her course by pregnancy. This is especially true since the more perfect evolution of the surgical means of controlling tuberculosis. These resources may all be applied as indicated during pregnancy."

Mathews[32] summed it up simply: "What was formerly an indication for therapeutic abortion is not an indication today. This is particularly true of tuberculosis and pregnancy." In regard to the vital indication, i.e., saving the life of the gravida with far-advanced tuberculosis who is in immediate danger of dying, he said, "Today interruption of the gestation probably would not be recommended." Similarly, the prophylactic indication, i.e., doing an abortion in order to retard the extension of the disease, "is definitely on the wane."

Discussion

A wonderfully succinct resumé of the evidence we have reviewed was expressed by Jacobs[27] in 1946, who, after analyzing the literature covering three decades, said "If abortion is to have any scientific justification, evidence must be sought showing that in general the harmful effects are avoided if the pregnancy be interrupted. A study of the literature will soon convince any impartial person that no such evidence exists."

Perhaps a more rational and humane approach to this problem is the one outlined by MacDowell[30] in 1945, "In regard to the expectant mother with advanced tuberculosis which is not amenable to any form of therapy [and abortion cannot any longer be considered therapy], the main purpose of treatment must be to safeguard the life of the mother until such time as the fetus becomes viable, so that this new life may substitute for the one which succumbs to disease."

Summary

A review of the literature of the past ten years on the role of therapeutic abortion in pulmonary tuberculosis has been presented. The preponderance of evidence indicates that pregnancy exerts no harmful effect on the course of tuberculosis, and that abortion is of no therapeutic value. This conclusion, however, should not be interpreted as an all-inclusive condemnation of abortion in tuberculous women. Attention is called to the very limited scope of this paper; the *medical* value of therapeutic abortion. Lack of time and space precludes discussion of the economic and sociologic factors which affect every patient with tuberculosis. A physician will occasionally advise interruption of pregnancy in a tuberculous woman because of various associated conditions, such as multiparity, financial distress, or illegitimacy. The decision as to whether or not to perform an abortion for these sociologic reasons will be reached in the conscience of the individual physician. It is extremely important for him to be intellectually honest and to recognize exactly why he is performing the abortion. While he is considering abortion we urge him not to court disaster by entertaining unfounded hopes as to its medically therapeutic value.

We would rather emphasize that advances in the medical and surgical treatment of tuberculosis

have so extended our control over the disease that even if intercurrent pregnancy were a threat to the life of the mother, which it is not, we are now in a position to manage the pregnant woman with tuberculosis conservatively, and avoid the distressing wastage of fetal life entailed in the risky and frustrating work of therapeutic abortion.

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Discussion

DR. F. L. GILES: I wish to compliment Dr. Bowles and Dr. Domzalski on the presentation of their paper concerning the use of therapeutic abortion in pulmonary tuberculosis. There is no doubt that during the past

fifteen years the ideas concerning the effects of pregnancy upon tuberculosis have changed considerably. This change in concept of the use of therapeutic abortion in tuberculosis has, no doubt, been brought about by the change in the prognosis and treatment of pulmonary tuberculosis. As the treatment of pulmonary tuberculosis has been more successful, the necessity of therapeutic abortion has become less frequent. I think we can safely say that in the future still more conservative use of therapeutic abortion will be delineated.

My feeling is that we cannot draw any hard and fast rules at the present time as to whether a patient who is pregnant and having tuberculosis should be aborted. Certainly, the treatment of this type of patient is an individual problem and no general rules should be made, except that I think that one general rule which we can follow with safety is that the treatment of the patient who is pregnant and has tuberculosis is the treatment of the tuberculosis patient and not the pregnancy. In other words, generally speaking, the tuberculosis must be the primary consideration as far as treatment is concerned. Certainly, other factors must be considered than the tuberculosis itself, but they are secondary factors. These factors which should be considered are the status of the pregnancy, that is, whether it is in the first three, first six months or later, the economic status of the patient, the type of delivery that will be required, whether the patient is a primipara or a multipara, whether the pelvis is contracted, and in other words whether the obstetrical delivery will be a simple delivery or a complicated delivery. Generally speaking, I believe that patients who are discovered to have advanced, very active pulmonary tuberculosis in the first trimester should be aborted. Patients who are discovered to have advanced pulmonary tuberculosis after the fifth month should be treated conservatively and not aborted. I say this because there is no doubt that pregnancy does require a great deal of the reserve energies of the patient. Persons who are discovered to have pulmonary tuberculosis require all the reserve and all the resistance that they can marshal to overcome the disease. My feeling is that patients who are discovered to have minimal or moderately advanced pulmonary tuberculosis in the first trimester may be followed conservatively for a period of one or two months, and during that period of observation a definite knowledge may be obtained as to the ability of the patient to overcome her tuberculosis and whether the pregnancy may prove dangerous to her or not. A person who has reached the sixth month before tuberculosis is discovered may safely, I believe, be able to continue her pregnancy. One of the most dangerous periods of tuberculosis in pregnancy or in the puerperium is after delivery, and the environmental status of the patient should be considered strongly in deciding whether a patient shall have a therapeutic abortion or not, because it is in this stress and strain of the postpartum period that many of the patients who have a stabilized lesion are apt to become active and a progressive pulmonary disease develops.

In conclusion, the treatment of the pregnant woman who has tuberculosis is a problem requiring the closest and strictest individual study. Any pregnant woman who has tuberculosis should have the services not only of the trained obstetrician but also of the trained phthisiologist, and in that way this type of patient will suffer less from her tuberculosis and a smaller number of therapeutic abortions will be necessary.

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Dr. R. N. Perlstein: Limiting their discussion to the problem of therapeutic abortion in tuberculosis, Drs. Bowles and Domzalski were unable to cover the entire broad problem of pregnancy in pulmonary tuberculosis. It should be emphasized that most of the ideal results quoted were obtained in patients who were actually in the hospital.

Everybody will admit that pregnancy and labor in themselves will not cause reactivation of tuberculosis. But in contrast to the simple problems of pregnancy and labor, there is the greater strain involved in preparing for, and later caring for, the new child. Our experience at Leahi is similar to that in many sanatoria: A large number of reactivations of tuberculosis can be traced to the most recent pregnancy. Pregnancy and the desire to care for the child personally after delivery leads some mothers to postpone proper sanatorium treatment of their tuberculosis.

Our feeling at Leahi is, as it always has been, that active tuberculosis in the first trimester is an indication for therapeutic abortion. We also feel that no tuberculous pregnant patient past the third month of gestation should be aborted.

* * *

Dr. F. D. Nance: I think that perhaps therapeutic abortions should not be limited to conditions which threaten the life of the mother. The child who is going to be born into a family where filth, ignorance and active tuberculosis are rampant should be given some consideration. This has been brought forcibly to my attention in recent weeks by the tragic deaths at the Children's Hospital of two children with tuberculosis who came from such a home.

* * *

Dr. Lyle G. Phillips: In connection with one of the later paragraphs of Drs. Bowles and Domzalski's paper wherein they mention the performance of therapeutic abortion for sociologic reasons, I should like to point out that the law in Hawaii is very clear on that point. Some years ago, I asked the Attorney General for an opinion on the question of therapeutic abortion, and when his statement was obtained, I had it circulated among the members of the society. The law states that a therapeutic abortion may be performed only if continuation of the pregnancy is a direct threat to the life of the mother. There is no room for doubt: Sociologic factors are not a legal basis for therapeutic abortion in Hawaii.

It might be a good idea to mimeograph the Attorney General's statement and circulate it again among the members of the Territorial Medical Association.

Coronary Thrombosis in the Territory of Hawaii

HENRY C. GOTSHALK, M.D., AND JOHN BELL, M.D.
HONOLULU

MYOCARDIAL infarction is the pathologic lesion which gives rise to the clinical symptoms of sudden precordial pain and shock, followed by either immediate death or changes characteristic of myocardial necrosis, such as increased leucocyte count, acceleration of the sedimentation rate, and definite electrocardiographic changes. Although many authors agree[1] that coronary thrombosis can occur without myocardial infarction, and that myocardial infarction may occur without coronary thrombosis, by far the most common cause of myocardial infarction is arteriosclerosis of the coronary arteries. In the majority of cases softening of an atheromatous plaque, resulting in capillary hemorrhage into the intima, can be demonstrated as the causative factor[2].

In this community myocardial infarction occurs often enough to warrant a statistical evaluation. The various nationalities and the racial makeup of the population lend additional interest to such a study.

Materials Used and Selection of Cases

All clinical data used in this paper were selected from the Queen's Hospital records between January 1, 1943 and January 1, 1948. During this period, there were 49,713 dicharges, of which 134 were signed out with the final diagnosis of myocardial infarction. Fifty of this group died and 72 apparently recovered. No effort was made to follow the course of the survivors. We rejected 12 records because of insufficient data to justify the diagnosis. The remaining 122 charts contained either a definite clinical history with electrocardiographic evidence of myocardial infarction, or positive necropsy findings.

In this study we attempted to evaluate the findings that were common to most of the charts. This included: (1) leucocyte counts; (2) sedimentation rates; (3) ages and nationalities; (4) electrocardiographic studies correlated with the pathologic findings.

The Leucocyte Counts

It has long been recognized and commonly accepted that a leucocytosis occurs following acute myocardial infarction. This change usually begins shortly after onset and remains for a few days to a week. In more extensive infarctions the leucocyte counts are usually higher and persist longer.

In our series there were 105 cases in which white blood counts were made after admission to the hospital.

TABLE 1.—*White blood cell count in fatal and non-fatal cases of myocardial infarction.*

WHITE BLOOD COUNT	FATAL CASES NO. OF CASES	FATAL CASES AVERAGE COUNT	NON-FATAL CASES NO. OF CASES	NON-FATAL CASES AVERAGE COUNT
5,000- 9,900	8	8,600	11	7,977
10,000-14,900	9	12,183	36	12,977
15,000-19,900	12	17,087	17	17,402
20,000-24,900	6	21,891	3	20,000
25,000-29,000			2	27,350
30,000-55,000	1	51,000		
AVERAGE		16,398		13,719
TOTAL CASES	36		69	

From the above small series no conclusions can be drawn. Approximately 85 per cent of cases showed a leucocytosis. The average white blood count for all cases was 15,058 cells per cubic mm.

Sedimentation Rate

Acceleration of the sedimentation rate is one of the most common findings in coronary thrombosis[3]. Usually the fastest rates occur in two to five days after the acute seizure and last from thirteen to nineteen days[4].

The average sedimentation rate (Wintrobe-Landsberg) in 65 cases, one week after admission to the hospital, was 22.5 mm. per hour, corrected. It was impossible from the data examined to obtain a graphic picture of the change. Many were single determinations and the time interval between sedimentation rates was variable.

Read before the 59th annual meeting of the Hawaii Territorial Medical Association, May 6, 1949.

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Ravin, A. & Geever, E. F.: Coronary Arteriosclerosis, Coronary Anastomoses and Myocardial Infarction, Arch. Int. Med. 78:2 (Aug.) 1946.
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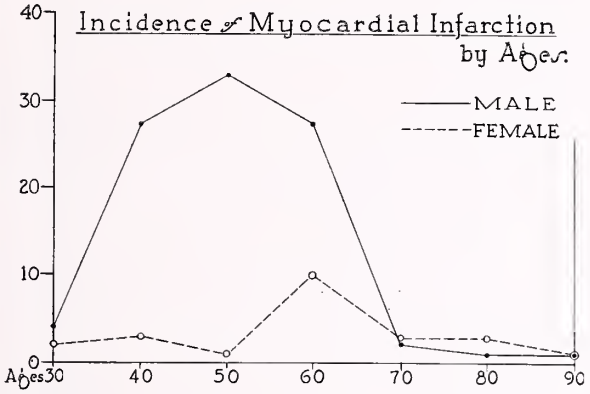
[2] Boyd, W.: A Text-Book of Pathology, 4th Ed., Lea and Febiger, Philadelphia, 1943.

[3] Riseman, J. E. F. & Brown, M. G.: The Sedimentation Rate in Angina Pectoris and Coronary Thrombosis, Am. J. Med. Sci. 194:392 (Sept.) 1937.
Gorham, L. W. & Thompson, H. C., Jr.: The Erythrocyte Sedimentation Rate and Differential Leucocyte Count in Coronary Occlusion, Internat. Clin. 1:44 (March) 1938.

[4] Shookoff, C., Douglas, A. H. & Rabinowitz, M. A.: Sedimentation Time in Acute Cardiac Infarction, Ann. Int. Med. 9:1101 (Feb.) 1936.

Age in Relation to Sex and Prognosis

The youngest case in this series was 30 years of age, the oldest, 94. The average age for the entire group was 55.7 years.



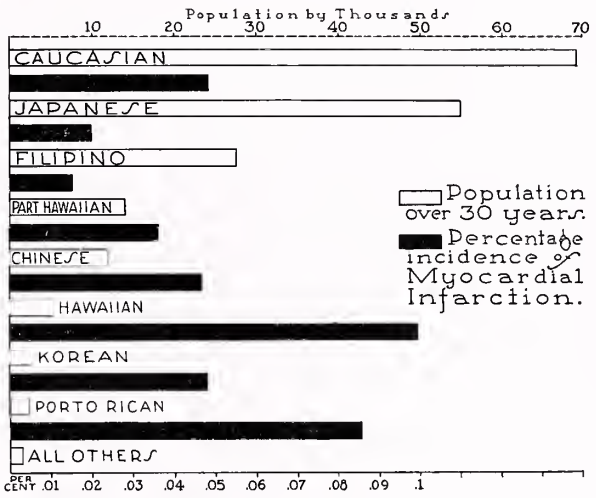
Race and Nationality

The table below gives a clear cut picture of the racial and national origins of the various groups which make up the population of Hawaii. It will be noted that when one considers the population statistics of the age groups over thirty, there is one death to every 266.7 persons. It is also interesting to note that the pattern suggested by our study closely follows that in the Territory.

RACE NATIONALITY	Population By Race And Nationality 1942-1948	Population by Race and Nationality Over 30 Years	Number of Deaths in Territory from Myocardial Infarction 1943 1947 Inc	Number of Cases Myocardial Infarction In Our Series 1943 1947 Inc.	Number of Deaths from Myocardial Infarction In Our Series 1943 1947 Inc
Hawaiian	10,650	5,065	61	5	4
Part Hawaiian	70,110	14,233	54	5	3
Puerto Rican	9,820	2,438	21	2	0
Caucasian	180,480	69,201	329	85	33
Chinese	30,530	11,958	56	8	1
Japanese	176,280	55,373	112	11	6
Korean	7,320	2,669	13	3	1
Filipino	53,640	27,122	52	3	2
All Others	1,670	561	9	0	0
TOTALS	540,500	188,620	707	122	50

Contrary to many previous reports and textbooks, persons of all races are affected by and die of myocardial infarction. There are many factors that affect the statistics of a report such as this, such as the reluctance of patients of some races to enter the hospital, and the fact that for some races the number of cases is too small to be statistically accurate. In general, however, it will be noted that Puerto Ricans and Hawaiians sustain myocardial infarction most frequently. Japanese and Filipinos are the least likely to be affected.

Interesting conjectures concerning the relative racial incidence of coronary artery disease could be postulated. Hawaiians particularly are subject to the degenerative diseases, especially vascular. They are by nature quite lackadaisical, which is contrary to the emphasis now placed on the psychobiological effect on vascular diseases. Their diet, however, is rich in carbohydrate and fat; most of them are overweight. Many have diabetes, which they are reluctant to control. The Japanese in general are an energetic group, usually not obese, and the incidence of diabetes and vascular disease is not high. Their diet consists principally of rice, vegetables and fish or lean meat. The bulk



of the Filipino residents are in a younger age group (25 to 45 years) than the other nationalities represented in the Territory. Consequently the incidence of vascular disease in this group may not be a true picture of their susceptibility to it. The Filipino diet consists principally of rice, vegetables, fish and lean meat. Most of this group are not obese.

In view of the above observations, a study of blood cholesterol and cholesterol esters in the various racial groups would make an interesting study.

A review of the 28 fatal cases coming to autopsy was made in an attempt to correlate the pathologic findings with the electrocardiographic interpretations. The electrocardiographs were read and the autopsies performed by several different persons. Serial electrocardiographs were often not done, and pathologic studies were often crude, without minute dissections or special preparations of the areas involved.

In general, there was agreement between the electrocardiograph and the post-mortem results.

Of major interest, however, were the not infrequent discrepancies. At autopsy, multiple infarcts of various ages were often found in which the electrocardiogram indicated one dominant pattern. The electrophysiology of the heart is changing throughout life and especially with major infarctions. The pattern of an electrocardiogram at a particular instant does not necessarily give a true picture of the morbid pathology present. We should like to emphasize the importance of serial electrocardiography in cases of myocardial infarction.

Discussion

DR. A. S. HARTWELL: The reason this is an important paper is that we need more statistics regarding similar diseases in different parts of the world.

Shortly after I arrived in Honolulu in 1941, one of the co-authors of this paper, Dr. Gotshalk, was in charge of the male patients of the medical service at Queen's Hospital. One day a seventy year old Hawaiian man was admitted with lobar pneumonia. We typed his sputum and found type III Pneumococcus as the causative organism. The next day when Dr. Gotshalk came back I said, "Well, I guess this man will die. He has a type III pneumonia and he is quite elderly." Dr. Gotshalk looked at me and said, "Oh, he will be all right." And I said, "But he has a type III pneumonia." He looked at me and said, "You are used to seeing type III pneumonia as it is seen in the eastern part of the United States. If this man were in Philadelphia I would agree with you, but out here in Honolulu type III pneumonia is not anywhere near such a severe disease." The man rapidly improved and Dr. Gotshalk's contention was correct. Diseases *do* differ from one climate to another.

Statistical surveys such as this help us a great deal in evaluating the varied clinical picture. Studies like that of Willius at the Mayo Clinic, where they evaluated sixty-five thousand women patients and found only thirty-five of them under the age of forty to have angina pectoris in the absence of hypertension, diabetes or other types of heart disease, are very valuable information to have because if a young woman comes in complaining of substernal pain, statistically it is extremely unlikely that she has angina pectoris. I am only sorry that this paper did not include more cases and that more than one hospital was not studied. However, attempts at such statistical surveys as this I know take a tremendous amount of time and, in the course of a busy practice, this is difficult to find.

In closing, I would like to note that of 135 records studied by these authors, 12 had to be rejected because there were insufficient data on the charts to justify the diagnoses. Thus, almost ten per cent of the records of the patients with diagnoses of myocardial infarction were incomplete, and I would strongly emphasize the necessity of adequate records on our patients so that when such studies as this are attempted as much information as possible will be available.

I wish to congratulate Drs. Gotshalk and Bell for this study.

Young Hotel Bldg.
Dillingham Bldg.

Recent Advances in Psychiatry

MARCUS GUENSBERG, M.D.
HONOLULU

IN REVIEWING the progress and the advances psychiatry has made in the past 20 years, the psychiatrist cannot but be impressed by the multitude of new and original approaches in the diagnosis and treatment of mental illness. It is a most gratifying experience to survey and assess the whole array of new diagnostic and therapeutic modalities that have taken psychiatry out of the era of descriptive classifications and custodial procedures into the promising field of dynamic concepts of mental illness and most striking results obtained by various forms of therapy. The short periods of hospitalization and much higher recovery rate and discharge rate that prevail in progressive mental hospitals are the best testimonials to the new trends in psychiatry.

Shock Therapy

Bini and Cerletti, two Italian psychiatrists, have inaugurated and established electro-convulsive therapy, which plays such a prominent part at present in the treatment of psychoses. Their conventional electric shock treatment has recently been enriched by various modifications, such as electro-narcosis and the brief stimulus therapy initiated by Liberson in Hartford, Conn. Affective disorders, acute excitements, and depressions frequently respond to this therapy with remarkable speed. Meduna in Chicago introduced the use of metrazol injections, which played a definite part in the new orientation in the field of psychiatry, although it must be stated that metrazol therapy has largely given way to electric shock treatment because of its proven advantages.

Manfred Sakel of Vienna conceived and developed the principles and method of insulin treatment in cases of early schizophrenia. This treatment modality, which calls for skill and training, is definitely established as one of the most effective methods of treatment of schizophrenia, which—in the opinion of many—is the number one health problem of the nation. Let me state here that out of a total of 1,200,000 hospital beds in the United States, more than 300,000 are occupied by schizophrenic patients. A psychiatrist using insulin cannot but be impressed by the favorable response of many schizophrenics to insulin therapy. A modification of insulin therapy given in sub-coma doses has proven very effective in the treatment of anxiety states in the psychoneurotic and in the psychotic.

Prefrontal Lobotomy

Egas Moniz, the eminent Portuguese neurosurgeon, made a remarkable contribution to psychiatry in 1936 when, after many years of painstaking study, he performed the first prefrontal lobotomy. This procedure has introduced the concept and the method of neurosurgery into the field of psychiatry. The prefrontal lobotomy and its various newer modifications, like topectomy, the subcortical under-cutting of the frontal lobes, transorbital lobotomy and others, form one of the most challenging chapters in modern psychiatry. The results of these procedures are highly encouraging, although many aspects still remain inconclusive. Sound clinical judgment, and a judicious and careful selection of cases and techniques to be employed, are needed in this new and promising field of neurosurgery. It should be stated here that, in accord with our present day knowledge, the indication for lobotomy is not a definite or specific nosologic entity, but rather a clinical syndrome characterized by tension, severe anxiety, and apprehension; in brief, a persistent emotional charge of such high intensity as to shape and influence the entire behavior pattern of the individual. The reduction of that emotional charge, the emotional blunting so to speak, be it in a case of a chronic schizophrenia, a case of an involutional, agitated melancholia, or a case of a malignant psychoneurotic anxiety state that defied other therapeutic approaches, is the aim and rationale of the lobotomy procedure.

Narco-Analysis

Another psychiatric modality which deserves a few brief comments is the sodium amytal interview, widely used in the diagnosis and treatment of various disorders. It has proven its value as a diagnostic procedure which may be instrumental in clarifying the diagnosis in doubtful cases. The sodium amytal interview is also being used as a method of prognosis, but above all it has estab-

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lished itself as a therapeutic procedure in certain types of psychoneurosis and borderline psychoses. It is based on the principle that patients under the influence of sodium amytal or related barbiturates lose most of their cortical inhibitions and are able to converse freely in an uninhibited manner, and thus uncover repressed and unconscious thoughts and feelings which later on may be used on a conscious level for proper psychotherapy. Perhaps the greatest use of this method was made during the war as a first aid measure in treating acute war neuroses in the field, like states of anxiety, combat fatigue, amnesias, or acute conversion phenomena like paralysis, hysterical blindness, etc. These interviews are commonly called narcotherapy or narcoanalysis; Horsley Grinker, William Menninger and Franklin Ebaugh are among the contributors to this challenging field of therapy.

Penicillin

Just in passing, let me call your attention to the role penicillin plays in the treatment of mental disorders of syphilitic origin. There is ample evidence to state that penicillin in large doses ranging from 10,000,000 units upwards is highly effective in most cases of asymptomatic neurosyphilis and in many cases of symptomatic neurosyphilis. Though it is true that penicillin therapy has considerably curtailed the use of fever therapy, it is also true that it has not yet entirely eliminated this well established procedure. Malaria therapy, inaugurated by Wagner Jauregg in 1917, in conjunction with penicillin, is still a powerful agent in the treatment of general paresis and primary optic atrophy.

Psychotherapy

Turning now to the rich field of psychotherapy, one must bear in mind that psychotherapy still forms the core of therapeutic psychiatry. In a sense, it is the only specific treatment modality, since it is based on the recognition of the etiological factors, of the true causes of a mental disorder, and of the basic conflicts and mental traumata that engendered the psychosis, and since it is aimed at resolving those conflicts, re-establishing a mental equilibrium, and reintegrating a broken or defective personality. All shadings and variations, from the plain and simple supportive therapy based on reassurance and suggestions, all the way to the conventional type of analysis aimed at catharsis, are being employed throughout the psychiatric world. The simple forms of psychotherapy are primarily concerned with strengthening the individual's emotional resources, increasing his tolerance for disturbing environmental influences, and trying to facilitate and promote a better adjustment in interpersonal relations. The analytical school, on the other hand, and its various modifications, are aimed at the uncovering of repressed, traumatic material of painful memories, unlocking the great reservoir of our unconscious which has a causal relationship to the mental illness or neurotic disorder, and resolving that material on a conscious level in a manner which is satisfactory to the individual and acceptable to society.

In the course of this form of psychotherapy, particular attention must be given to the various mental mechanisms, the psychological devices, the patient has been employing to solve his particular problems and conflicts, and to the reasons why he has failed in solving them. His basic motivations, his specific emotional needs, his cravings and ambitions, his failures and frustrations, are made the subject of a thorough exploratory study for the sake of initiating and carrying out a therapeutic regimen based on a resolution of the etiologic factors. In short, the man's personality, this amazing and wonderful blend of all the innate and of all the acquired characteristics, this product of interaction of inherited and genetically determined attributes, and of all the environmental influences which act upon us from the moment the human sperm joins the human ovum, that is, the whole personality, must be the subject of study, analysis and therapy aimed at reintegration of a disordered personality structure.

This psychodynamic concept, which owes its origin to the great contributions of Freud and his school, stresses the genesis and—if I may use the term—biography of a psychosis or neurosis, the when's, the why's, the where's, and the how's. We want to know the mode of onset and the time of onset of a mental disorder. We want to know the setting in which it occurred. We want to know the growth and development of the psychotic or neurotic pattern that presents itself, and we want to know the personality structure, the prepsychotic setting that engendered the psychotic or neurotic reaction. We are not satisfied with the fact that a patient is delusional or that he hallucinates in the auditory field. We want to know the content and the very substance of his delusions and hallucinations, the stuff they are made of. We want to know why one patient projects, seeks the culprit in his environment, and blames other people for his own shortcomings and frustrations, while another patient turns against himself with profound feelings of guilt, remorse, unworthiness, self-con-

demnation, and self-punishment. We want to know why one patient is aggressive, belligerent, destructive, and homicidal, while another patient is depressed, withdrawn and acutely suicidal. We are not satisfied with diagnosing a marital maladjustment and leaving it at that. We have every intention to lift the curtain hiding the troubles, and the frustrations in the sexual sphere that lie at the root of that maladjustment. We are not content with diagnosing the problem of alcoholism in a particular individual. It is our purpose to find out why that individual has chosen this drug addiction as his means of solving his problems, as his adaptation mechanism. We want to know why he has chosen the substitute of an artificially induced euphoria of an alcoholic spree for the real thing which is life itself.

Clinical Psychology

In this connection, one should mention the invaluable contribution that modern clinical psychology has made towards the refinement of the clinical diagnosis and evaluation of psychotic and neurotic disorders. As a matter of fact, some of the newer projection techniques and tests developed by men like Rorschach, Goldstein, Bender, Murray and others, have become part and parcel of psychiatry of today.

Group Psychotherapy

At this point, it is appropriate to discuss briefly the principles and the practices of group psychotherapy, which have been developed throughout the nation in the last twenty years. Here again, the form and the material used by the psychiatrist in his group sessions will largely depend on the psychiatrist's background, experience and his basic philosophy. It will be determined to some extent by his own personality and the way and manner in which he resolved his own personal problems. Whatever the approach, the methods employed in group psychotherapy have some basic denominators in common. First, they take place in a social setting. The patient is part of a group in which the herd-instinct and the group-consciousness with its demands on the individual's social responsibilities and social resources is bound to keep at bay to some extent the selfish and egotistical urges and drives of the individual participant. As such, it will successfully counteract his tendency to retreat and to withdraw, which is so manifest and so pronounced in many psychotic individuals. The socializing and civilizing effect of a group-environment is undeniable. Furthermore, a group session, in which members of the staff and patients engage, is bound to produce a therapeutic setting with a steady and obvious demand on the patient's tolerance, on his willingness to profit by error, on consideration of and respect for others, and lead eventually to the reestablishment and observance of social amenities and responsibilities without which life in the community is impossible. Another therapeutic factor inherent in any group session is the realization on the part of the patient that he is not alone in this wide world with his fears and stresses, and that he belongs to a community of friends and fellow men who are in distress, with whom he can identify himself, and whose problems and situations he is able to share. He will lose that feeling of isolation and become aware of the social aspects of mental illness or of a mental hospital for that matter. All those implications can then be utilized by the psychiatrist in a manner aimed at better adjustment, improved interpersonal relations, and eventual recovery and return to a wholesome community life.

Teamwork in Mental Hospitals

This particular problem has a definite and direct bearing on the whole concept of a modern mental hospital and the part it must play in the life of the mentally ill if they are to recover in the shortest possible time. In the opinion of many leaders of psychiatric research and practice, the mental hospital must be not just an efficient organization with well established routines and schedules, but a living community based on the full participation of all its members in its daily life, serving the one and only objective, that is: restoring the mentally ill to health. The psychiatrist, the psychologist, the psychiatric nurse, the psychiatric social worker, the attendant and the psychiatric aide, the occupational therapist and the dietitian, the physiotherapist and the maintenance man, must all form part of a team. To illustrate this point, let me state briefly that psychiatric nursing—for instance—one of the newest nursing branches, represents quite a departure from the usual principles, techniques, and manual skills of nursing. Psychiatric nursing is primarily a matter of a mutual personal relationship of an approach and attitude towards the mentally ill, with all the intangibles that such a relationship implies. To be with the patient, to talk to him, to listen to him, to anticipate some of his needs, to organize his various activities, to calm the excited and to stimulate the depressed, this is the essence of psychiatric nursing and not the TPR's, the charts or files, the linens, or other inanimate things that make up the surroundings of the pa-

tient. The psychiatric social worker with her keen awareness of the social needs of the patient, with her knowledge of his family ties, his employment, his social life and his hobbies, is another facet of the same problem, the problem of seeing and evaluating, and dealing with the patient in toto, as an integrated whole, the all embracing aggregate of what he is, of what he has, of what he pretends to be, and of what he intends to become.

You will readily see how the contribution of the psychiatric nurse and social worker and the occupational therapist must complement and supplement the work done by the psychiatrist. You must remember that the patient after leaving the doctor's office following an interview or after completing a deep insulin coma does not live in a vacuum to last until the next treatment, but that he continues to be a complex personality with his needs and motivations, his aims and his struggles. Unless the hospital establishes and maintains a proper therapeutic climate geared to the needs of the patient and conducive to his recovery, it will fail in its main task. To illustrate this point a little bit further, I would like to give you just a few examples of attitudes developed in some hospitals, attitudes designed and adapted to the specific needs of some types of patients. An attitude of "unsolicited love" has been thought of as most suitable for the withdrawn, mute, and inaccessible catatonic patient who has completely turned away from life, and who can be lured back into reality, into contact with other people only by an amount and quality of love and affection which surpasses by far the needs of an ordinary person. As soon as this patient, in response to treatment, begins taking interest in his surroundings and interacting with people, the attitude of unsolicited love will gradually be changed into an attitude of earned love with the implication that the patient must make an effort—an effort within his limitations and his capacities—, yet an effort to earn and to deserve the attention and the love given to him. The depressed patient, on the other hand, will best respond to an attitude of firm kindness, kindness tempered by firmness, the latter to prevent him from over-indulging in dodging responsibilities because of unjustified feelings of guilt, or of self-condemnatory trends. It is needless to add that firmness should at no time reach the level of threat or punishment, which have no place in psychiatry. That much for attitude therapy and emotional climate to prevail in mental hospitals.

The Psychosomatic Concept

No discussion of recent advances in psychiatry would be complete without at least a brief reference to the contribution psychiatry has made in the field of general medicine. I am referring to the work, done by Cannon, Harold Wolff, Flanders Dunbar, Alexander, Weiss and English, and many others, usually referred to as the psychosomatic concept in medicine. These authors have established, beyond the shadow of a doubt, the importance and the part which our emotional life plays in human pathology. It is a well established fact that emotional experiences like fear, joy, shame, or anger have a definite influence upon pulse, respiration, blood pressure, upon the color and temperature of our skin, and upon various functions of the gastro-intestinal tract, its secretions and its excretions; yet only few realized until very recently that personality problems and inner conflicts like marital incompatibility, domestic quarrels, sexual maladjustment, dissatisfaction with the job, or other anxiety-producing situations are capable of producing physical symptoms and somatic complaints of a highly incapacitating nature. Until recently, "the average physician was contented with the study of the organism as a physical and chemical laboratory dominated by blood chemistry, x-ray and other technical devices, but he was unimpressed and indeed often holding in contempt the psychological background of the patient. Thus, the emotional side of illness considered immaterial and unscientific has been almost entirely neglected until it has been definitely established that a vast number of sick people do not have any bodily disease to account for their illness." According to Weiss and English, it is reliably estimated that only one-third of the patients seeking medical help suffer from organic or physical diseases which fully account for the complaints and symptoms of the patient. Another third of the patients do not show any evidence at all of organic or physical illness; their ills, subjective as well as objective, can be traced to emotional disturbances alone. Lastly, one-third of the patients have symptoms that are in part dependent upon emotional factors, that is, they cannot be explained solely in terms of the organic findings which may be present. Yet, all these people present a set of physical symptoms and they expect and ask for relief from their physical distress in accord with time-honored medical procedures, in utter disregard of the emotional disturbances and inner conflicts which are at the root of their gastro-intestinal disorders, or cardiovascular disturbances, or disorders of some other system of their body.

The roll-call of the organs taking part in these emotional disturbances would include nearly every organ of our body and every region of the human

anatomy, with the digestive apparatus and the cardiovascular system heading the list. Suffice it to say that head and neck, throat and lungs, the skin and the mucous membranes, the genital organs, particularly the pelvic organs of the female, all may be the seat of these so-called psychosomatic disorders, produced by emotional tensions and disturbances. No organ or system of organs is immune to psychosomatic involvement. Moreover, the selection of the organ and the type of the disorder may frequently offer a clue to the traumatic experience and emotional stress underlying the condition.

All these physical disorders produced by disturbances in the emotional life of the patient are based—generally speaking — on somatization of emotional impulses. It is a well established fact that tension and anxiety may be relieved to a large extent by diverting and channelling the original impulses through the autonomic nervous system into visceral organs, symptoms and complaints. In some cases, anxiety may be arrested entirely by draining it off into body tissues, by converting unbearable stress and strain into physical phenomena, like hysterical anesthesias, paralyses, tremors, or other manifestations of unlimited variety. It is obvious that only by uncovering the true emotional causes and resolving the symptom-producing conflicts will these patients be helped towards recovery. It is, therefore, essential for the physician to know his patient as a human being rather than as a mere medical case, as a sick person rather than as a carrier of a symptom or a complaint. The problems the patient faces in regard to his job and vocation, marriage and home, sexual life and social adjustment are as important for the diagnostic evaluation and therapy in such a case as the mere clinical study of his physical symptoms. To go further into this field, should be the subject of another presentation.

Preventive Psychiatry

A problem of crucial importance, the maintenance of good mental health and the prevention of mental illness—you will readily realize—cannot be covered within the framework of this presentation. Let me state, however, that the ultimate objective and the future of psychiatry must lie in this new and promising field of preventive psychiatry that will help people to reach emotional and sexual maturity, to maintain good mental equilibrium, to derive all the happiness in life to which they are entitled, without encroaching upon the rights and privileges of their fellow men or society at large. Its objective must be the cultivation, the nurturing, and the maintenance of mental health, one of the greatest assets of homo sapiens.

Conclusion

In summarizing this review of recent advances in psychiatry, one cannot but be impressed by the great variety and multitude of new approaches, new interpretations, and avenues of treatment devised in the last quarter of a century in matters pertaining to mental health and mental illness. The very fact that so many seemingly contradictory approaches live side by side and are being employed in the daily work of the mental hospitals—this very fact alone—would seem to prove that we are living in an era of search and ferment, rather than in an era of crystallized and standardized concepts and procedures. In such an era, there seems to be no room for rigid concepts, panaceas, dogmatism, or finality. Instead, understanding, caution, tolerance, judicious and lucid thinking, diligent study and adherence to the basic principles of medical sciences must be our guide since they alone will insure scientific progress in the field of psychiatry.

Territorial Hospital, Kaneohe.

Secondary Repair of Harelip

WAYNE W. WONG, M.D.
HONOLULU

THE SECONDARY repair of harelip patients presents certain problems which must be studied before surgery is performed. An analysis of a previously repaired harelip will usually reveal an anatomical closure of the cleft with the action of the lip in eating and speaking unimpaired unless there is an associated cleft of the alveolar ridge, hard palate and soft palate. There is, however, a psychological "sore spot" in the minds of the parents, and later of the patients, which is usually due to an asymmetry of the region and not to an impairment of eating or speaking. The purpose of a secondary repair is to reduce this asymmetry to a minimum so that both patients and parents will be less sensitive about it.

The configuration of the lip, which is dependent on several features, must be considered in the surgical repair in order to obtain the best results. However, when any secondary repair is performed, the region becomes the site of concentrated postoperative interest by all who are concerned with the patient. A heretofore "accepted" defect now is studied most assiduously, and every minute difference is pointed out critically— oftentimes without any consideration of the original defect.



FIG. 1(a) shows a patient with a repaired left harelip in which the flaring left alar cartilage, the prominent scar, and the notching of the mucous membrane portion of the lip are the noticeable sites of loss of symmetry. FIG. 1(b) shows the secondary repair. The left nostril is smaller than the right, but at a later date a small section will be removed from the roof of the nostril to match that of the right nostril.

Sites to be Analyzed

In an analysis of a previously repaired harelip, the following sites should be studied: (1) The shape of the alae and the size of the external nares. (2) The "height" of the base of the alae in relation to the normal side. (3) The length of the upper lip and the nature of the scar on the lip. (4) The alignment of the muco-cutaneous border. (5) The fullness of the mucous membrane portion of the lip. (6) The contour of the maxillary arch in relation to the mandibular arch.

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Asymmetry of the Nose

In the correction of the alar cartilage and the reshaping of the cartilage to match the normal side, sometimes an angulation of the upper third of the lateral wall of the naris is formed. This causes the naris to lose its normal shape and can be corrected by removing a triangular section of the alar cartilage at the angulation with the apex of the triangle at the peak of the angulation. This section breaks the resiliency of the cartilage and causes the alar cartilage to arch without angulation. If the base of the alar cartilage is elevated to the same level as the alar cartilage on the other side, the cartilage must be freed from its base by adequate undermining and rotated and elevated toward the midline. In so doing, it may be necessary to remove a section of the superior border of the alar cartilage to prevent buckling of the region when the base is elevated. The size of the external naris may be reduced by removing a suitable section from its floor. Fig. 1(a) shows a patient with a flaring nostril and the subsequent repair, Fig. 1(b). In such a flattening of the alar cartilage, as in Fig. 1(a), it is hardly ever necessary to excise a section of the alar cartilage at its base in order to reduce its flaring length. Once this is done, further repair is made difficult.

The Lip Scar

The scar on the upper lip depends, in a large part, on the manner in which the orbicularis oris is held together. The approximation is done best by the use of a figure-of-eight suture and must approximate muscle substance to muscle substance. If an unrepaired harelip is dissected carefully at the site of the cleft, one finds that there is a thin fibrous layer that completely envelops the muscle in the region of the cleft. If, in the original repair, this is not removed so that muscle substance is approximated to muscle substance, a subcutaneous

separation of the scar results, as in Fig. 2(a). The scar on the lip can be minimized by handling the tissue gently, and this can be done best by the use of skin hooks which cannot crush tissue. A carefully placed subcuticular suture further reenforced by an adequate number of interrupted horse hair sutures will bring the skin edges together with the least amount of tension. This tension on the suture line should be further lessened by the post-operative use of a Logan bow for support against the lateral pull of the orbicularis oris in the process of crying. It would be ideal to maintain this support for two to three weeks post-operatively, but this usually is shortened by the development of a contact dermatitis caused by the adhesive used in retaining the Logan bow in position. Gentle massage of the scar beginning two and a half to three weeks post-operatively will aid materially in softening it. Poor healing qualities may be due to inadequate protein intake, insufficient ascorbic acid, or relative secondary anemia.



FIG. 2(a) shows a patient with a repaired right harelip in which the muscle substance was not adequately approximated. This resulted in a notching of the scar and the mucous membrane border. FIG. 2(b) shows the secondary repair which required that the entire lip be reopened and sutured as in a primary case.

The Muco-cutaneous Border

The muco-cutaneous border on one side should match that on the other so that the vermilion border should have as near as possible the shape of the normal lip. Any loss of alignment is readily noticed. Fig. 3(a) shows a case in which this factor was not considered in the original repair. In other cases the mucous membrane along the original cleft may be incompletely removed so that an ectopic island of mucous membrane is left stranded in a bed of scar on the lip proper.

If the lip scar and the mucous membrane scar are repaired in one continuous vertical line, its subsequent contraction often produces a notching of the lower edge of the mucous membrane of the lip. If this vertical line is broken by a small Z-plasty, this notching can be corrected easily as in Figs. 1(a) and (b). In minimizing the scar on the upper lip, one must consider the fact that the amount of tissue available is limited. One must, therefore, weigh the benefits of complete excision of the scar against the disadvantage of a slightly deficient upper lip.



FIG. 3(a) shows a repaired left sided harelip in which the drooping left alar cartilage and the symmetry of the muco-cutaneous line were not considered in the original repair. The upper lip is definitely deficient in substance due to an unwarranted sacrifice of labial tissue at the original repair. This resulted in a tight upper lip and, in contrast, a protruding lower lip which is better appreciated when seen in profile as in FIG. 3(c). FIG. 3(b) shows the results of the secondary repair in which a portion of the lower lip was used to supplant the deficient upper lip. The left alar cartilage was adjusted to match that on the right. FIG. 3(d) shows the secondary repair from the side view.

The Jaws

One of the basic rules of growth is that the stimulus of function is essential for normal development. Without the stimulus of a normal acting orbicularis there is a lack of growth stimulus on the alar cartilage of the affected side. If too much of the muscle is removed in the original repair, the tight upper lip that results may tend to retard the growth of the maxillary arch. However, the growth of the face in the region of the maxillary arch is a complicated process, and many factors are involved, all contributing in a variable

manner to its ultimate development. If there is an associated cleft of the alveolar ridge, hard palate and soft palate, previous surgical trauma incident to forcible closure of the cleft at the sacrifice of one side of the arch will result in a smaller maxillary arch and a subsequent malocclusion, due to an increase in the space between the upper and lower teeth when the mandible is in a position of rest. This increase in the intermaxillary clearance space causes the lower jaw to move a bit more forward and upward than normal in the process of chewing so that the lower jaw protrudes, adding to the deformity of a deficient maxillary arch. Fig 3(c) shows this condition to a moderate extent, and Fig. 4(a) shows it to a marked degree.

The correction of a disproportion of the upper and lower jaws depends on the degree of normal occlusion that is present and the relative fullness of the upper lip in contrast to the lower lip. The entire maxillary arch can be expanded by orthodontic manipulations to obtain as near a proper occlusion as possible, and also to fill out the arch and to improve the profile of the upper lip. Orthodontic manipulations of the individual teeth in the region of the alveolar cleft are necessary for proper dental occlusion. If the teeth have been extracted in the region of the cleft, a properly fitting dental prosthesis can be used to obtain occlusion and at the same time fill out the contour of the upper lip.



FIG. 4(a) shows a case of a bilateral harelip in which in the original repair, the maxillary arches were forcefully moved toward the midline and too much of the upper lip was sacrificed. This resulted in a retardation of the growth of the maxillary portion of the face, with a relative overgrowth of the mandible. This relationship is the result of a large intermaxillary clearance space due to an underdevelopment of the maxillary dental arch and the apparent overdevelopment of the mandible dental arch. FIG. 4(b) shows the secondary repair in which a portion of the lower lip was transplanted to the upper lip, and the columella was transplanted at a higher level on the nasal septum. This was done in one operative procedure.

In marked prognathism it may be necessary to do a retroplacement of the mandible, but this should be done only after careful study of the dental occlusion and the fullest utilization of orthodontia in obtaining this occlusion.

Tight Upper Lip

With a tight upper lip, the fullness of the lower lip can be used to replace the deficient upper lip by the use of the Abbe-Estlander operation. This is accomplished by cutting the upper lip completely through at the line of the scar. The immediate result is an inverted V-shaped defect which is then filled by a wedge of tissue of comparable size from the lower lip. This full thickness pedicle graft is then freed from its lower lip attachment in seven to ten days, depending on the color of the graft upon temporary constriction of the pedicle. The result of this procedure is shown in Figs. 3(c) and (d). In Fig. 4(a) the same procedure was followed, and in addition the columella was elevated from its bed and reattached at a higher level on the septal cartilage.

Summary

The problems concerned in a secondary repair of patients with previously repaired harelip are discussed. The secondary repair should consider an anatomic as well as a cosmetic correction of the defect in order to obtain results which will reduce to a minimum the psychological "sore spots" of both parents and patients.

Victoria Medical Building.

Hawaii
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[EDITORIALS]

STREPTOMYCIN FOR TUBERCULOSIS IN PREGNANCY

At the present time we have no definite knowledge as to whether streptomycin should be used in the ordinary therapeutic dose in pregnancy or not. We certainly feel unsafe in administering a dosage of 2 grams daily to any patient who is pregnant because of the rather marked toxic effect that streptomycin has on the vestibular and auditory nerves of the embryo. Also, we have no definite knowledge as to the effects of streptomycin on those nerves in doses of ½ to 1 gram. The reason for this is that not enough patients have been treated over a long period of time during pregnancy to give any definite statistics as to what effects of streptomycin on the embryo may be. There are occasionally quotations in the literature of streptomycin having been administered during a short period of time during pregnancy for various types of infections, including tuberculosis, and none of these indicate that over a short period of time that streptomycin has produced any harmful effect. However, in infants when streptomycin has been given for tuberculosis we have noticed that when it is given in the dosage figured per kilo of body weight, streptomycin definitely produces more complications than in the adult. Therefore, streptomycin must be, as yet, used conservatively for only short periods of time in a pregnant woman who has tuberculosis, and until this has been more definitely worked out dihydro-streptomycin should be used in preference to streptomycin itself.

F. L. GILES, M.D.

ABORTION FOR TUBERCULOSIS—WHY?

Pulmonary tuberculosis is not adversely affected by pregnancy, according to a careful review of the world's literature by Bowles and Domzalski in this issue of the JOURNAL. The common practice of performing therapeutic abortions upon pregnant women on the ground that they have tuberculosis should therefore be reviewed critically in the light of this paper. It should be noted that they do not conclude that such abortions should not be performed. They merely point out that abortion in such cases should not be expected to have any favorable effect *per se* on the course of the patient's pulmonary disease. If the pregnancy should be interrupted, as many of the discussants felt it should be, it should be interrupted on other grounds than the subsequent course of the patient's tuberculosis. This, it appears, is not likely to be improved as a result of abortion—though the skepticism voiced by some of the discussants will no doubt find support in some quarters still.

If tuberculosis constitutes a more than ordinarily urgent socio-economic indication for interruption of pregnancy, then the physician is faced with the ineluctable fact that the laws in many states, and in Hawaii, do not permit abortion to be performed on social and economic grounds. The only justification for the operation is a threat to the life of the mother. Tuberculosis apparently does not constitute such a threat. And tuberculosis is not, therefore, a legal cause for therapeutic abortion.

H.L.A.

ARE YOU A SPECIALIST?

The problem of deciding whether a given practitioner may properly be called a specialist has only recently begun to attract serious attention among American practitioners. In England it has become an acute and vexing problem, and it is certain to become more so in the U.S.A.

An obvious answer to it is to decide on the basis of limitation of practice, on the theory that a man who rejects all sorts of medical problems but one should be allowed to charge somewhat higher fees in order to compensate himself for the work he has presumably turned away. But an unqualified man may do this, and it is not a satisfactory solution.

Another obvious answer in this country is to designate as specialists all who hold the diploma of the appropriate American Specialty Board; and most would agree that this is proper. The obvious corollary to it, however—denial of specialist rating to all who do not hold such a diploma—meets with almost no-one's approval. Neither is this the answer.

It seems evident that only individual evaluation of all men who aspire to specialist status, primarily on the basis of training and experience, can ever give an answer to the question. In England this has been done by Assessment Committees in various regions, but the only appeal allowed has been to the same committee plus two additional appointees. An editorial in the *British Medical Journal* suggests that at least half the appeal board should come to the hearing with unbiased minds, which seems no more than fair. The problem of achieving some uniformity of stringency of criteria to be used by the various Assessment Boards has also been difficult of solution; indeed, the editor feels it is inevitable.

A distinction has been attempted, in England, among specialists: those of "outstanding ability" have been recognized by Distinction Awards. This suggests that we might approach our own problem by asking each Specialty Board to set up criteria for (1) certified specialists, actual Diplomates, as at present, and (2) uncertified specialists, qualified on the basis of training or experience or both, plus limitation of practice, to receive higher fees for specialist or consulting services, but not as high as an actual Diplomate. These criteria could then be used in each community as a guide to the designation of specialists by a locally constituted board of physicians. Appeal, when necessary, might be made directly to the American Specialty Board concerned.

H.L.A.

STEROIDS AND THE JAPANESE

Gotshalk and Bell, elsewhere in this issue of the JOURNAL, have recorded data which suggest that the Japanese, in Hawaii at least, are decidedly less subject to coronary disease than members of other races. The age distribution of Filipinos in Hawaii, though they did not treat it statistically, is well known to be "skew" in the direction of younger age levels, and cannot be compared with that of the Japanese; the low incidence of coronary thrombosis in the Filipino members of their series is therefore somewhat less significant.

Japanese are remarkably free from at least one other disorder: squamous cell carcinoma of the skin. This is the more remarkable because of the relatively high degree of exposure to sunshine enjoyed by this racial group; constituting less than half the total population of Hawaii, they constitute well over half of the sailors, fishermen and farmers of the community.

Now, vitamin D, probably formed in the skin largely as a result of solar radiation of cholesterol, is chemically closely akin to the actively carcinogenic steroids, and may very well play some part in the pathogenesis of skin cancer. It has also been strongly suggested that cholesterol is a factor in the etiology of coronary disease, since it seems to play an important role in the development of the intimal atheromas of that condition.

If the Japanese people are so constituted as to function on a lesser amount of cholesterol than other races, or if they metabolize it more efficiently, this might provide a single explanation of their remarkable comparative freedom from these two disorders. They tend in general to ingest less animal fat than Caucasians or Hawaiians, but the significance of this is problematic. Studies of cholesterol ingestion, blood levels, and metabolism in the Japanese might be extremely illuminating. In the absence of a biological or medical foundation here, the University of Hawaii might well undertake such a task.

H.L.A.

MEDICAL NEWS

Vitamin K_1 oxide is distinctly superior to the ordinary preparations of vitamin K in reversing the hypoprothrombinemic effects of dicumarol. Clinical comparison of this new substance with the older Menadione bisulphite and Synkayvite shows that vitamin K_1 oxide is able to return the prothrombin time to normal in one-tenth the time required by the other substances. The dosage is 500 mg. intravenously. The same dose given intramuscularly has little or no effect on the prothrombin time. This new substance may prove to be of great importance since it restores prothrombin time to normal in dicumarolized patients almost as quickly as a blood transfusion. (Gaines, et al., *Arch. Int. Med.,* 83:632 [June] 1949).

Undecylenic acid, given orally in large doses in the form of gelatin pearls, has resulted in pronounced improvement of psoriasis in 30 per cent of a series of 41 patients. (Perlman and Milberg, *J.A.M.A.,* 40:865 [July 9] 1949.) Seven out of 8 patients with psoriatic arthropathy were distinctly benefited. The dose is 20 gm. of undecylenic acid daily, which means about 45 pearls containing 0.44 cc. each.

Salazopyrin, a compound containing salicylic acid and sulfa-pyridine, is reported by Bargen (*M. Clin. North America,* 33:935, July, 1949) to be effective in idiopathic ulcerative colitis. The toxic effects of sulfapyridine preclude the use of this drug routinely, but severe cases are benefited by it. Bargen found it especially useful in colitis patients who had arthritis (i.e., about 5 per cent). Salazopyrin was first used in Sweden for the treatment of rheumatic polyarthritis.

Urecholine is now recommended for the "dumping syndrome" (flushing, sweating, palpitation and weakness, with occasional syncope, occurring immediately after, or during meals in gastrectomized patients). This drug has appeared in almost every article on vagotomy during the past two years as the treatment of choice for post-vagotomy gastric atony and hypo-motility. Why this drug should benefit a patient with the dumping syndrome is a mystery, since the dumping syndrome is thought to be due to either (1) mechanical distention of the jejunum by the too-rapid emptying of the stomach, or (2) too precipitous a rise in blood sugar due to rapid absorption in the small intestine (absence of pyloric delay), or (3) the compensatory hypoglycemia which follows (2). In my experience with only one patient, urecholine has controlled "dumping" symptoms after everything else failed.

Thephorin ointment is recommended as a specific treatment for the pain and swelling of insect stings (bees, hornets, and perhaps centipedes). (Strauss, W. T., *J.A.M.A.,* 140:603 [June 18] 1949). Others have found antihistaminics just as effective orally in mosquito bites, etc.

NPH 50 is a new modified insulin which is under trial at the Mayo Clinic. Preliminary results in 9 patients indicate much more exact control of glycosuria than is possible with ordinary protamine zinc insulin. The N stands for "neutral," P for Protamine, H for Hagedorn, who developed it, and 50 for the quantity (0.50 mg.) of protamine which goes into the preparation of 100 units of this insulin. The new product has an intermediate duration of action (about twelve hours), and contains no excess protamine, so that it can be mixed with plain insulin without any loss of the quick action of the plain insulin. Such mixtures can be made in the bottle, since NPH 50 is a stable crystalline preparation. (*Proc. Staff Meet., Mayo Clin.,* 24:365 [July 6] 1949).

Great minds in the same channel: Dr. Harry Arnold, Sr., has long incubated the idea of preventing venous thrombosis in the legs postoperatively by electrical stimulation of the calf muscles with a sinusoidal current. V. L. Tichy of Western Reserve reports (*Surgery,* 26: 109 [July] 1949) that he has had exactly such a gadget on clinical trial since January, 1947. Sinusoidal stimulation produces a gradually increasing muscular contraction with gradual release, instead of the abrupt contractions produced by galvanic and faradic stimulation; no shock is felt by the patient. Stimuli are given thirty times a minute for thirty minutes, followed by a half hour rest period, for 24 or 48 hours after operation. Tichy apologizes for reporting on only 1200 cases in which this treatment has been used, but his results are excellent: only six episodes of venous thrombosis, and no pulmonary emboli, which is much less than one per cent incidence of thrombo-embolic complications, in contrast with the usual incidence of four to five per cent in most reported series. Judging from the number of ligations of the femoral veins and inferior vena cava being performed, post-operative thrombo-embolic complications are being diagnosed more often in Hawaii.

Vitamin B_{12} is ineffective when given orally to patients with pernicious anemia, and so is extract of duodenal mucosa, but the two given together are just as effective as liver extract or B_{12} parenterally. The new extract (from hog duodenum) is effective in doses of less than one gram daily, when given with 5 micrograms of B_{12}. (Bethell, et al., *Univ. Hosp. Bull., Ann Arbor,* 15:49 [July] 1949). Perhaps the liberation of P.A. patients from the necessity of frequent "pokes" is at hand!

The simple anemia which accompanies chronic infections has always proven entirely refractory to any treatment short of blood transfusions. Remarkable hematopoietic effectiveness in such patients is reported for cobaltous chloride, in doses of 100 mg. three times daily. A rise in red count and hemoglobin occurred in patients with chronic pulmonary tuberculosis, osteomyelitis, rheumatoid arthritis, and even in a patient with Cooley's anemia. (Berk, L., et al., *N. Eng. J. Med.,* 240:754 [May 12] 1949). The frequent gastro-intestinal upsets caused by cobalt were reduced by the use of smaller doses (20 to 60 mgm. tid), without loss of erythropoietic effectiveness. (Robinson, J. C., et al., ibid, p. 749).

C. A. Domzalski, Jr., M.D.

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Dentistry

Bernier, J. L. *Atlas of dental and oral pathology.* 4th ed. rev. c1948. (from Dental Society)

Blair, V. P. *Essentials of oral surgery.* 3rd ed. c1944. (from Dental Society)

Brenner, M. D. K. *The story of dentistry.* 2nd ed. c1946. (from Dental Society)

Burket, L. W. *Oral medicine.* c1946. (from Dental Society)

Carr, M. W. *Dentistry.* c1946. (from Dental Society)

Dwyer, H. S. *Oral health.* c1945. (from Dental Society)

Miller, S. C. *Oral diagnosis and treatment.* 2nd ed. c1946. (from Dental Society)

Miller, S. C. *Textbook of peridontia.* 2nd ed. c1943. (from Dental Society)

Noyes, F. B. *Oral histology and embryology.* 6th ed. rev. c1948. (from Dental Society)

Ryan, E. J. *Psychobiologic foundations in dentistry.* c1946. (from Dental Society)

Seldin, H. M. *Practical anesthesia for dental and oral surgery.* 3rd ed. rev. c1947. (from Dental Society)

Leprosy

Impey, S. P. *A handbook on leprosy.* 1896. (gift of Bishop Museum)

Lie, H. P. *Internationale wissenschaftliche leprakonferenz.* v. 2 and v. 3. 1910. (gift of U. S. Public Health Service)

Materia Medica, Pharmacology, etc.

Davison, F. R. *Handbook of materia medica, toxicology and pharmacology.* 4th ed. c1949. (gift of publisher)

Gorss, Martin. *The salicylates.* c1948. (gift of publisher)

Nursing

Bartlett, H. M. *Some aspects of social casework in a medical setting.* c1940. (from Nurses' Association)

Cardwell, V. E. *The cerebral palsied child and his care in the home.* 1947. (from Nurses' Association)

Gipe, F. M. *Ward administration and clinical teaching.* c1949. (gift of publisher)

Randall, Margaret. *Ward administration.* c1949. (from Nurses' Association)

Ophthalmology

James, R. R. *Studies in the history of ophthalmology.* 1933. (gift of Dr. Ralph B. Cloward)

Scobee, R. G. *A child's eyes.* c1949. (gift of publisher)

Miscellaneous

Bunnell, Sterling. *Surgery of the hand.* 2nd ed. c1948. (gift of publisher)

Knowles, F. C. *Diseases of the skin.* 4th ed. rev. c1942. (gift of Dr. J. T. Wayson)

Merrill, Vinita. *Atlas of roentgenographic positions.* 2v. c1949. (gift of publisher)

Ustvedt, H. J. *Pulmonary tuberculosis.* 1942. (gift of T. B. Association)

* * *

Last month a gift of money was received from Dr. and Mrs. Edgar S. Childs for the purchase of books in the field of orthopedics in memory of Dr. R. Nelson Hatt. It seems a most appropriate way to remember him as these volumes will be a useful and permanent memorial bearing his name.

* * *

An arrangement has been made with the Dental Society to provide space in the Medical Library for a few of the most important dental books and journals which they secured as a gift from HSPA. Because we hoped that doctors and nurses would find some value in this material and also to encourage dentists by their use of the library to further develop a good dental collection, we agreed to display current issues of dental journals in the library. Back files will be turned over to the custodian of the embryo dental collection at present housed at Palama Clinic.

* * *

A contribution of $50.00 has been received from Kuakini Hospital to help defray the expense of library service extended to internes, resident physicians, student nurses and other members of their staff.

For the past few years the Library Board of Governors has been attempting to awaken the hospitals to their financial responsibilities in regard to the Medical Library. Since the Library has been placed on a membership basis, it seems only logical that a contribution should be forthcoming from some source to cover services to members of the above mentioned groups, who have never been required to pay a library fee.

Last year St. Francis contributed $100.00 to the Library Fund and it is hoped that along with Kuakini and other hospitals, these donations may be relied upon annually.

BOOK REVIEWS

Surgery of the Hand. By Sterling Bunnell, M.D. Second Edition, 930 pp. Price $16.00. J. B. Lippincott Company, Publishers, Philadelphia, 1949.

Bunnell's first edition of *Surgery of the Hand* was the world's master work on man's other eye and combination tool. The second edition is one world war and 20,000 hands better. The basic work remains the same, the approaches to the many special problems of the injured hand have been multiplied.

In this work Bunnell emphasizes the value of (1) active splinting as compared with immobilized splinting, and (2) occupational therapy with the will to work and accomplish is compared with what to the patient is senseless and tiresome physiotherapy. The work accomplished is his report card.

The work on the restoration of the intrinsic muscles of the hand has been much enlarged.

Of special interest to the general practitioner who usually sees the injured hand primarily, is the section on special types of wounds—effect of vibrating tools, roller and mangle injuries, indelible pencil wounds and grease gun injuries.

The section on special infections and congenital anomalies is of special value as a reference work.

STEELE F. STEWART, M.D.

A Child's Eyes. By Richard G. Scobee, B.A., M.D., F.A.C.S. 109 pp. Price $2.00. C. V. Mosby Co., St. Louis, Mo., 1949.

This small book is intended primarily for parents, but it treats so many pertinent problems that are present in ophthalmology that it is recommended reading for all pediatricians and general practitioners. It discusses the effect of crossed eyes on the child's personality and answers many pertinent questions of parents. The problem is discussed from the standpoint of physiology and it goes on to discuss the meaning of far- and near-sightedness. Brief mention is made as to the role of inherited defects, birth injuries, and illnesses of childhood as causative factors of squint.

There is an excellent chapter on the use of glasses in the treatment of crossed eyes and, finally, the treatment from the standpoint of eye exercises and surgery.

This book is bound to aid the pediatrician and general practitioner in answering the many questions which parents expect the doctor to know. The author treats the subject in his usual clear, easily understandable manner.

OGDEN D. PINKERTON, M.D.

Surgical Clinics of North America. New York Number. Abdominal Surgery. Pp. 305-629. Price $15.00 a year. W. B. Saunders Co., Philadelphia, 1949.

This volume of *Surgical Clinics of North America* presents 16 articles on abdominal surgery, including traumatic abdominal surgery, the majority of which are by surgeons of metropolitan New York. In addition, there are discussions of nine other surgical subjects concerned primarily with laboratory diagnosis, thoracic surgery and anatomy, and gynecological surgery. The material presented is interesting and is thoroughly but briefly discussed. There is very little material concerning the biliary tract and no paper directly concerned with gastric surgery. There is excellent coverage concerning the problems of anesthesia, chemotherapy and protein nutrition in patients with abdominal surgical conditions.

The title, *Symposium of Abdominal Surgery,* is not quite as comprehensive as one might be led to believe, but it is instructive and well worth reading.

ROBERT G. JOHNSTON, M.D.

How To Become A Doctor. By George R. Moon, A.B., M.A. 131 pp. Price $2.00. Blakiston Company, Philadelphia, 1949.

To the aspirant to the title "Doctor" this little volume is of great service. Written by the Examiner and Recorder of the University of Illinois Colleges of Medicine, Dentistry, and Pharmacy, it is designed to answer the questions of that vast number of students interested in the health professions. As one might expect the major portion of the book deals with the Doctor of Medicine. It begins with advice regarding pre-medical education and the selection of an appropriate college, leads on to medical school selection, enlightens one concerning the submission of applications and even one's conduct during interviews, comments upon the manner in which the committees on admission operate, offers advice relative to the personal conduct of the medical student, and concludes with an outline of the medical curriculum. Included is a complete listing of all approved Class A medical schools together with pertinent information regarding location, founding, class size, admission requirements, and tuition costs.

The balance of the book deals with similar information—but in greatly abbreviated form — regarding dentistry, pharmacy, veterinary medicine, osteopathy, optometry, and chirapody (all of which education pursuits lead to the title of "Doctor").

Mr. Moon has well written a concise little book but is inclined to overly glorify one or two of the lesser healing arts on the periphery of the scientific sphere. The sections on medicine are well done and should be especially valuable to the pre-medical student.

GROVER H. BATTEN, M.D.

Atlas of Roentgenographic Positions. By Venita Merrill. Two volumes, total of 708 pp., including 1500 illustrations. Price $30.00 per set. C. V. Mosby Co., St. Louis, Mo., 1949.

These two volumes on radiographic technique cover the entire field very minutely. It is undoubtedly the most complete text on this subject yet published. Every phase of diagnostic roentgenology is very carefully and thoroughly presented. The number of new and little known radiographic positions is great. The volumes should be of particular interest to physicians practicing orthopedics. For instance, there are twenty-two different positions illustrated in the text on the shoulder girdle. The accompanying illustrations are of excellent quality and a study of them is well worthwhile to the physician as well as the technician. The volumes are

very attractively bound and the material is all presented in a scientific, yet readily understood fashion.

It is felt that the work is a very valuable contribution to X-ray and should be available to both technicians and physicians who are actively engaged in diagnostic roentgenology.

PHILIP S. ARTHUR, M.D.

Pathology and Surgery of Thyroid Disease. By Joseph L. DeCourcy, M.D., and Cornelius B. DeCourcy, M.D. 476 pp. Price $10.00. Charles C. Thomas, Publisher, Springfield, Ill., 1949.

This is a new book which represents the knowledge obtained over a period of years by the DeCourcy Clinic, in Cincinnati, in a field in which they have been unusually proficient.

The subjects of pathology and surgery of thyroid disease are adequately presented in a very readable form and show a very orderly manner of handling the subject matter. A number of details from their experience are presented which seem somewhat new and different to this reviewer. Their method of postoperative care for exophthalmic goitre by giving thyroid extract seems to have merits according to their figures of low percentage of recurrence following surgery. In the field of pathology they give their new views in regard to the etiology of thyroiditis which seem to be of considerable interest.

The authors quote at length from the literature of other masters of thyroid surgery including a number of large clinics throughout the mainland and on the continent, so that the sum total is more than just a summary of the DeCourcy Clinic experiences.

The book is very well printed on high grade paper, with many line and colored illustrations, which add to its attractiveness.

This volume should be a welcome and a handsome addition to the library of any physician who is interested in thyroid surgery.

LAURENCE M. WIIG, M.D.

The Compleat Pediatrician. By W. C. Davison, M.A., D.Sc., LL.D., M.D. Sixth Edition. 256 pp. Price $4.75. Duke University Press, Durham, N.C., 1949.

Keeping pace with the rapid strides made by modern medicine, this sixth edition has literally been "brought up to date." No recent medical advancement of import has escaped the author. Maintaining its former popular concise form, he presents a wealth of information in highly accessible fashion. This book remains a "must" for the library of every physician who deals with infants and children.

DUKE CHO CHOY, M.D.

Operative Technic—General Surgery. Written by a distinguished group of American surgeons and edited by Warren H. Cole, M.D., F.A.C.S. Illustrated, 951 pp. Price $16.00. Appleton-Century-Crofts, Inc., New York, 1949.

Dr. Cole has edited well a mass of valuable material contributed by thirty-four American surgeons of renown, and I believe this volume is destined to occupy an important place in the young surgeon's library.

In my opinion the work is particularly commendable due to its treatment of "operative technic" in the broader sense; that is, pure tissue manipulation from incision to dressings is supplemented by sound pre- and post-operative format along with a paragraph or two on the regional anatomy involved as well as a brief discussion of indications for the operative procedure. Each author discusses the particular operations with which he is thoroughly familiar, no attempts being made to present a compendium of all operative procedures devised for a given surgical disease.

The book is only moderately well illustrated. For me, more diagrammatic illustrations would improve its usefulness. This, however, is a relatively small criticism in comparison to the overall value of the book. I believe the information contained will prove to be of considerable assistance to anyone interested in the art of surgery.

V. C. WAITE, M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 285th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on June 23, 1949. Members present were: Drs. Wm. N. Bergin, Leo Bernstein, M. H. Chang, L. R. Fernandez, Samuel M. Haraguchi, S. Kasamoto, J. Matsumura, Robert M. Miyamoto, P. Okumoto, Walter J. Seymour, George Y. Tomoguchi, and Francis Wong. Dr. George Tomoguchi called the meeting to order at 7:55 p.m.

Doctors Seymour and Bernstein presented a report of the meeting of the House of Delegates of the Territorial Medical Association held in Honolulu on May 5, 1949.

Dr. Harold M. Johnson, dermatologist of Honolulu, addressed the society on "Common Skin Diseases," illustrated with Kodachrome slides. His address was followed by a panel discussion.

The meeting adjourned at 9:45 p.m.

* * *

The 286th regular meeting of the Hawaii County Medical Society was held in the staff room of the Hilo Memorial Hospital on July 21, 1949. Members present were: Drs. S. R. Brown, M. H. Chang, M. L. Chang, W. T. Chock, H. E. Crawford, D. S. Depp, S. Kasamoto, T. Kutsunai, R. M. Miyamoto, S. Mizuire, P. Okumoto, A. Orenstein, C. L. Phillips, G. Y. Tomoguchi, T. D. Woo, R. Yamanoha, and H. B. Yuen. Guests present were Mr. Patrick O'Connor of the Hilo V. A. office, Mr. John Lindner, administrator of Hilo Memorial Hospital, Dr. A. Wong of Maui, and Dr. W. J. Gaenge.

The president, Dr. George Y. Tomoguchi, called the meeting to order at 7:45 p.m. The minutes of the previous meeting were accepted as read and placed on file.

A proposed resolution against compulsory health insurance was read and discussed; it was moved by Dr. Phillips, seconded by Dr. Mizuire and unanimously carried that this Society draft such a resolution and forward it to the proper persons. The resolution is to read as follows:

WHEREAS, the United States has the highest standards of health, of medical care, and of scientific medical facilities of any country in the world, as a result of our system of free enterprise; and

WHEREAS, compulsory health insurance, wherever tried, has caused a decline in national health and deterioration of medical standards and facilities; and

WHEREAS, wherever the government has assumed control of medical services, the result has been tremendous multiplication of costs over original estimates, extreme tax burdens, and national deficits, and gradual extension of socialization into other activities of national life, now, therefore,

BE IT RESOLVED, That the Hawaii County Medical Society does hereby go on record against any form of compulsory health insurance or any system of political medicine designed for national bureaucratic control; and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to the President of the United States, to the Delegate to Congress from the Territory of Hawaii and that said Delegate be and is hereby respectfully requested to make every effort within his power to prevent the enactment of any such legislation.

The matter of M.D. automobile emblems were discussed and those desiring special emblems with "Hawaii County Medical Society" engraved on them were requested to notify the secretary. The stickers issued by the AMA and opposing compulsory health insurance were discussed and the secretary was instructed to mail these to the individual members.

Mr. Patrick O'Connor described briefly the set-up of the Veterans' Administration office in Hilo and veterans' hospitalization benefits. He then introduced Dr. M. T. Sax, chief medical director of the Veterans' Administration Regional Office in Honolulu. Dr. Sax urged obtaining authorizations for all but acute emergencies and establishing an estimate of the cost of treatments to veteran patients; he stated this to be especially important because of the limited funds available to the regional office and because of rising costs of hospitalization. The problem of chronic alcoholics among the veterans was discussed—as yet, this problem is unsolved. A panel discussion of veterans' medical and hospitalization problems followed.

* * *

A special dinner-meeting of the Hawaii County Medical Society was held at the Hilo Hotel on Friday evening, August 12, 1949. The two speakers of the evening were Miss Bell Greve, Director of the Cleveland Rehabilitation Center at Cleveland, Ohio, and Commander T. J. Canty, USN, Officer in Charge of the Amputation Center and Chief of Orthopedic Surgery, U. S. Naval Hospital at Mare Island, California.

Members present were Drs. William N. Bergin, Leo Bernstein, Clarence L. Carter, M. L. Chang, W. T. Chock, Donald S. Depp, Samuel M. Haraguchi, S. Kasamoto, T. Kutsunai, Robert M. Miyamoto, Junichi Matsumura, S. Mizuire, Pete Okumoto, Clyde L. Phillips, and Timothy D. Woo. Guests present were Mr. S. K. Smiddy, the local chairman of the National Society of Crippled Children and Adults, Inc., Miss Hammers of the Tuberculosis Association of Hawaii, and Miss Hong of the Sight Conservation Bureau.

The program began at 8:20 p.m. and both Miss Greve and Commander Canty spoke on some phase of the subject of Rehabilitation. Commander Canty illustrated by lantern slides the "Functional Full Length Leg Brace."

* * *

The 287th regular meeting of the Hawaii County Medical Society was held on August 18, 1949, in the staff room of the Hilo Memorial Hospital. Members present were: Drs. Bergin, Bernstein, M. H. Chang, Chock, Crawford, Depp, Haraguchi, Jenkin, Kasamoto, Loo, Matsumura, Miyamoto, Okumoto, Orenstein, Seymour, Tomoguchi, and Yuen. Mrs. Edith C. Bennett, executive secretary of the Hawaii Territorial Medical Association, was a guest. President Tomoguchi called the meeting to order at 7:45 p.m.

Dr. Orenstein presented his Counselor's report in which he discussed some of the problems taken up in the two Council meetings held in May and June.

Dr. Crawford moved, Dr. Bernstein seconded, and it was unanimously voted upon that this Society elect a Disaster Council. The members voted for five persons, three from the Hilo area and two from the rural districts; those elected were Drs. Orenstein, Mizuire, and Crawford from the Hilo area and Drs. Carter and Seymour from the rural areas. The chairman of this Disaster Council will be chosen by its members.

A letter from the Honolulu County Medical Society together with a completed fee schedule for the obstetrical and gynecological procedures was read to the Society.

The regular business meeting ended at 8:30 p.m. and the remainder of the meeting was turned over to Dr. Howard Crawford, president of the Hawaii Territorial Medical Association. He discussed with the membership some of the problems of the Territorial Society; he brought up to date the Public Service Committee, the recent referendum which caused a lot of pilikia; the recent defeat of President Truman's Reorganization Bill elevating Oscar Ewing to Cabinet status and the unlikelihood of a Compulsory Health Insurance Bill going through Congress at the present time. In this respect, he stated that radio transcriptions both for and against compulsory health insurance are available and suggested that the Society find means of presenting them to the public. He discussed the matter of fee schedules and it was the consensus of most of the members present that this should be done by the Territorial Society and should not be delegated to each local society. Dr. Crawford spoke informally and, in general, requested the Society's opinion.

Mrs. Bennett discussed the Annual Territorial Society meeting which will be held in Hilo on May 4-7, 1950. It is definite that Drs. Blalock and Paul White will be speakers at this meeting; she suggested that the president of this Society consider committees as soon as possible to begin working on this meeting. The American Legion Clubhouse is being strongly considered as the site of this meeting.

ROBERT M. MIYAMOTO, M.D.
Secretary

* * *

HONOLULU COUNTY MEDICAL SOCIETY

The regular monthly meeting was held July 8, 1949, at 7:30 p.m. in the Mabel Smyth Building. Dr. Arnold presided; about 78 guests and members were present. A special movie on "Hunting in Hawaii" taken by Dr. Clarence E. Fronk was shown. Dr. Samuel Allison gave a talk on acne entitled "Pimples and the Practitioner." Dr. Carlo Scuderi, an orthopedic surgeon from Chicago vacationing in Hawaii, discussed "Backaches from an Orthopedic Standpoint."

The expenditure of $803.36 from the General Reserve Fund to finance the 1949 postgraduate lectures was approved.

Dr. Arnold announced that the Chamber of Commerce has issued a special invitation to physicians to join their organization. Members were urged to give this their consideration on the ground that the Chamber and the physicians offer mutual benefits to one another.

An amendment to the By-Laws providing $37.50 annual dues for service members was rejected by the membership on the ground that the proposed dues were excessive.

Dr. Hartwell explained the program of the Public Service Committee of the Honolulu County Medical Society. He said that they plan to hold a series of programs with representatives of various business groups in order to get as many viewpoints as possible on what needs to be done to improve medical services. The following resolution was read and approved by a unanimous vote:

> WHEREAS, the United States has the highest standards of health, of medical care, and of scientific medical facilities of any country in the world, all of which have been developed under our system of free enterprise; and
>
> WHEREAS, compulsory health insurance, wherever tried, has caused a decline in national health and deterioration of medical standards, facilities, and services; and
>
> WHEREAS, wherever any government has assumed control of medical services, the result has been tremendous multiplication of costs over original estimates, extreme tax burdens and national deficits, and gradual extension of socialization into other activities of national life; and
>
> WHEREAS, there are ever increasing opportunities to obtain voluntary medical insurance, every effort should be made to encourage the public to obtain such insurance; now, therefore,
>
> BE IT RESOLVED, That the Honolulu County Medical Society does hereby go on record as being unalterably opposed to any form of compulsory health or sickness insurance or any system of political medicine designed for national bureaucratic control; and
>
> BE IT FURTHER RESOLVED, That this resolution be forwarded to the President of the United States, and to the Delegate to Congress from the Territory of Hawaii and that said Delegate be and is hereby respectfully requested to make every effort within his power to prevent the enactment of any such legislation.

Dr. F. J. Pinkerton reported on the A.M.A. Convention and urged that the delegate and the alternate be sent to future meetings. He commended Dr. Hartwell and Mrs. Bolles on the help that they had given him at this meeting.

The chairman of the Fee Schedule Committee, Dr. Rodney West, stated that his committee is gradually completing the fee schedule section by section and that these sections will be presented separately for approval as they are completed.

Dr. Paul Wiig introduced Dr. M. Behrend, Professor of Surgery at Jefferson Hospital and former president of the Pennsylvania State Medical Society.

* * *

The regular monthly meeting of the Society was held August 5 at 7:30 p.m. in the Mabel Smyth Auditorium. The vice-president, Dr. Samuel Yee, presided; about 70 members and guests were present.

Dr. John Upton, Chairman of the California Blood Bank Commission, was introduced by Dr. Homer Izumi.

Dr. John Frazer discussed "Hearing Problems in Childhood"; Dr. B. K. Bagchi, Chief, Department of Electroencephalography, University of Michigan, discussed "Electroencephalography for the General Practitioner"; and Dr. A. S. Hartwell reported on the scientific aspects of the A.M.A. convention.

The following proposed amendment to the By-Laws was read:

"Chapter I, Section 2 b (1)—Honorary Membership: Distinguished members of the medical profession who are not members of this Society may be elected to this status by vote of the Society and shall pay no dues or assessments.

"Chapter I, Section 2 b (2)—Associate Membership: Members in this Society who have retired from the practice of medicine; medical officers of the United States Army, Navy and Public Health Service assigned to duty on the Island of Oahu or in this

area; physicians employed by governmental agencies in Honolulu who are not licensed to practice in Hawaii; internes or residents in hospitals on the Island of Oahu; and regular members of this Society in good standing whose residence in Hawaii is interrupted for one year or more, may upon application be elected by the Board of Governors to Associate Membership in the Honolulu County Medical Society and shall pay no dues or assessments except that they shall be required to pay $5.00 annually for the HAWAII MEDICAL JOURNAL and privileges of the Honolulu County Medical Library. Such membership shall be subject to renewal every twelve (12) months and shall expire in the same manner as regular membership in the event that it is not renewed, or upon termination of the circumstances qualifying the member for this status of membership.

"Delete (3), (4), and (5).

"Delete also Chapter VI, Section 2 b and c."

Dr. Rodney West, Chairman of the Fee Schedule Committee, described the method being used to revise the now obsolete fee schedule of the Society. He explained that the fees charged by all members of the Society in their offices were being used to establish fees for each item in the schedule and that the completed schedules are being submitted to about 25 doctors for suggestions and also being circulated to the other County Societies for their opinion. He explained that his committee was attempting to establish a fee schedule which would be representative of the fees charged for lower income groups, assuming 100% collections.

It was moved and carried that drafts of each successive portion of the fee schedule be submitted to all members before acceptance by the Society and that criticisms or suggestions be submitted in writing to the Fee Schedule Committee and not from the floor in the course of the meeting. It was then moved and carried that following this procedure the schedules be brought up for a first reading at the next monthly meeting and that they be brought up again for final passage at a subsequent meeting.

A motion to accept the Obstetrical and Gynecological portion of the fee schedule except for General Office Procedures was seconded but was not carried.

Dr. Withington made the point that a fixed fee schedule is a potentially dangerous thing to have, and Dr. West explained that this is not to be a fixed fee schedule but is to serve as a guide in formulating contractual arrangements with H.M.S.A. or insurance companies. A motion to approve the Obstetrical and Gynecological portion of the fee schedule on first reading was seconded and passed. It was then moved and passed that each division of the fee schedule be read twice and if approved on the second reading that it be used as a basis for negotiating with whatever institutions or organizations are to employ it.

It was pointed out that the Fee Schedule Committee had not been authorized to actually negotiate with the contracting agencies. It was pointed out by Dr. Pinkerton that the present fee schedule should be called a contractual fee schedule in order to make it clear that it is to be used for forming specific contracts and that it is not to be a fee schedule to cover all forms of medical practice. Dr. West agreed that the committee would adopt this view. It was pointed out by Dr. Richert that the H.M.S.A. is basing its future plans on the present C-Schedule with the 10% increase and that if the fees are to be changed they must be changed gradually and not by action of the Medical Society alone.

JOHN W. DEVEREUX, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was called to order by Dr. William Goodhue, in the absence of Dr. Masunaga, President, at the Wilcox Memorial Hospital on Wednesday, June 8, 1949.

Members present were: Drs. Bickell, Boyden, Chisholm, Cockett, Fujii, Goodhue, Ishii, Wade, Wallis. Visitor: Dr. Steureman.

A letter from Dr. Harry Arnold was read regarding the reciprocity of the Hawaii Medical Service Association with mainland voluntary medical plans. Purpose of this letter was to familiarize the representative going to the annual American Medical Service Association meeting of our desire so that he would know what action to take if this question was brought up at this meeting. Dr. Wade made a motion that we favor such a plan if it can be worked out; motion was seconded by Dr. Boyden and passed unanimously.

Dr. Ishii, chairman of the Cancer Committee, read and discussed a letter and recommendations by the Cancer Committee of Maui. It was suggested that Dr. Ishii draw up such a group of plans for Kauai and submit it at the next regular monthly meeting. In regards to Cancer program, Dr. Chisholm stated that his technician, Mrs. Hardy, would probably be interested in going off to the mainland to take a course in learning to stain and screen cytological smears. Dr. Cockett made a motion that Dr. Chisholm investigate the possibility of such a program with Mrs. Hardy and to report at the next meeting of the Society. Dr. Fujii seconded the motion and it was passed unanimously.

Dr. Wade, delegate to the annual meeting of the House of Delegates, reported that the referendum which had recently been conducted regarding the $26 for the Public Relations fund had failed by a vote of 4—1. He also reported that Mrs. Bennett is the full-time secretary of the Territorial Medical Association and has no further connection with the Honolulu County Medical Society. Motion was made by Dr. Wallis and seconded by Dr. Chisholm that the Kauai County Medical Society write a letter to Dr. Pinkerton thanking him for his work in the Public Relations Committee and reassure him that our Society was behind his work 100 per cent. This motion was passed unanimously.

Funds for Dr. Lynn to conduct his program on Kauai: Sometime ago when Dr. Lynn came to the islands, the doctors all agreed that a fund should be collected by the county society to help with this program. It was suggested at this time that wherever possible to collect donations rather than fees in order to extend the limits of the program. Some of the doctors pointed out that they had set bills for their patients and it was also pointed out that some of the doctors probably had not cooperated with this program as much as they might have. It was pointed out by some of the doctors that one of the reasons that they were unable to collect the money was because some of the patients felt that since Dr. Lynn was hired by the territory and that they pay territorial tax, that they should not be required to con-

tribute to such a fund. No definite action was taken on this matter. It was referred to a later meeting of the Society.

SAM R. WALLIS, M.D.
Acting Secretary

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The regular meeting of the Kauai County Medical Society was held at the home of Dr. Wallis on July 13. Those present were Drs. Bieber, Boyden, Chisholm, Cockett, Fujii, Ishii, Mason, Brenneke, Wade, Wallis. Dr. Crawford, president of the Territorial Medical Association, was also present.

A discussion of the Cancer Society and its funds and program was held. The question of sending a technician from Kauai was settled negatively. Dr. Ishii put forward a tentative program of plans for the Kauai Cancer Society. The proposals were discussed at length and it was finally moved and seconded that Dr. Ishii draw up another set of recommendations embodying the ideas set forth in the discussion.

Dr. Wade notified the Society that he would have to resign his position as Delegate to the Territorial Medical Society as he had also been elected to the Council. The resignation was accepted and Dr. Boyden was named as Delegate.

A letter from the Territorial Medical Society was read suggesting that the Society go on record against compulsory health insurance. It was moved and seconded that the secretary do so and forward a copy of the resolution to President Truman, Delegate Farrington, and the Territorial Medical Society.

Following the business meeting Dr. Crawford discussed various questions concerning the Territorial Medical Society. The failure of the assessment for the Public Relations Fund was discussed along with the plans for the coming year in public relations.

JAMES R. MASON, M.D.
Secretary

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MAUI COUNTY MEDICAL SOCIETY

A special scientific meeting of the Maui County Medical Society was held at 8:15 P.M. on May 12, 1949, following a dinner at the Maui Grand Hotel. Members present were: Drs. Underwood, Cole, Sanders, Shimokawa, Fleming, St. Sure, Kanda, Tofukuji, Izumi, Jim, Ohata, Haywood, Tompkins, H. Kushi, Kashiwa, Wong, Rockett, Patterson, Burden, and McArthur. Guests were: Drs. George Pack of the Memorial Hospital for Cancer in New York City, Dr. Lawrence Wiig of Honolulu, and Dr. Ferkany.

It was moved by Dr. Burden and seconded by Dr. McArthur that Dr. Sanders be nominated to serve on the Board of the HMSA. Passed unanimously.

Dr. George T. Pack discussed cancer and answered questions on various phases of that disease for the rest of the evening.

* * *

A special scientific breakfast meeting was held at the Puunene Athletic Club at 8:30 A.M. on May 15, 1949. Members present: Drs. Underwood, Sanders, Rockett, St. Sure, Cole, Patterson, Ohata, Izumi, Jim, Kanda, Wong, Kashiwa, Shimokawa, McArthur and Fleming. Guest: Dr. Shirley of San Francisco, Calif.

Dr. Shirley discussed and answered questions on problems of child psychology.

ROBERT F. COLE, M.D.
Secretary



NOTES AND NEWS

PERSONALS

DR. EDWARD W. LUM has opened his office at 483 S. Beretania St., Honolulu, for the practice of pediatrics, taking over the office formerly occupied by Dr. Rudolph Benz, who has retired. Dr. Lum is a native of Honolulu, who was graduated from the University of Hawaii and did graduate work in public health at the Yale University, following which he received his medical degree from the Temple University Medical School, in Philadelphia, in 1944. He interned at the Episcopal Hospital, in Philadelphia, and served in the Navy in 1945 and was discharged in 1946 as a Lt. Senior Grade. He received his training in pediatrics at the Johns Hopkins University, in Baltimore, where he was an assistant instructor in pediatrics for two years and an instructor in his third year. Dr. Lum is a Diplomate of the National Board of Medical Examiners and has completed the first part of the American Board of Pediatrics examination.

DR. TERUO YOSHINA, of Honolulu, has resumed his practice of pediatrics following post-graduate study during the summer in New York and in Chicago. He also took a course in endocrinology, at the University of California Hospital, in San Francisco.

DR. DORIAN PASKOWITZ has been appointed the assistant chief of the Bureau of Venereal Disease Control, in the Territorial Board of Health. This position was formerly held by DR. WALTER QUISENBERRY, who is now the chief of the Bureau of Venereal Disease and Cancer Control in the Board of Health.

DR. CLIFTON C. RHEAD, of Honolulu, has been elected to associate membership in the American Psychiatric Association at its recent convention in Montreal, Canada.

DR. A. LESLIE VASCONCELLOS has returned from a mainland trip during which time he took post-graduate study at Cook County Hospital in Chicago, and other medical centers.

DR. HARRY L. ARNOLD, JR., has been appointed a Contributing Editor of the *International Journal of Leprosy*.

DR. RICHARD P. WANG has joined the staff of the Territorial Hospital, at Kaneohe, as physician psychiatrist. He was formerly an instructor in psychiatry at Cornell University Medical School, in New York City.

Christopher J. Hamre, former professor of zoology at the University of Hawaii, has resigned from this post to become professor of anatomy at the University of North Dakota Medical School, in Grand Forks, North Dakota. Dr. Hamre has just completed one year of work as a research associate on the staff of the Mayo Foundation, Rochester, Minnesota, where he has been carrying out fundamental research in various problems, including a study on the effect of lack of Vitamin A in relation to the bile duct, which paper he presented at a recent meeting of the Honolulu Surgical Society. His wife, DR. ERNESTINE HAMRE, will move to North Dakota also, giving up her practice of hematology in Honolulu. THE JOURNAL wishes the Drs. Hamre much success in their new undertaking.

DR. THOMAS BENNETT, of Honolulu, has returned from the mainland, during which time he successfully completed the examinations for certification by the American Board of Neurosurgery. He visited a number of neurosurgical clinics and attended the meeting of the Neurological and Neurosurgical Society of San Francisco, California.

DR. AND MRS. JAMES W. CHERRY, of the Clinic of Honolulu, have announced the birth of their second daughter, Andrea Louise, born at The Queen's Hospital on August 10, 1949.

DR. DANA RICHARDS, chief resident physician of the Kapiolani Maternity and Gynecological Hospital, was married on June 30, 1949, at St. Andrew's Episcopal Church. His bride was Miss Rita Pochert, of Owosso, Michigan, who is a supervisor on Liholiho III at Queen's Hospital. She is the daughter of Dr. and Mrs. R. C. Pochert, of Michigan.

DR. R. D. KEPNER has recently accepted an invitation to act as consultant in Hawaii for the Devereux Schools of Devon, Pa., and Santa Barbara, Calif., for children with emotional difficulties and certain educational problems.

DR. JEN FONG MOO, who recently completed a residency at the St. Francis Hospital, of Honolulu, has become associated in the practice of otolaryngology with DR. L. Q. PANG of the Chock-Pang Clinic, Honolulu. Dr. Moo was graduated from the St. Johns University Medical School in Shanghai, following which he took two years of training in his specialty at the Peking Union Medical College. Following this he practiced otolaryngology in Shanghai in association with Dr. A. M. Dunlap, former professor of otolaryngology of Peking Medical College. Dr. Moo has been a resident at the St. Francis Hospital for the past two years.

DR. GOONZO YAMASHITA, of Honolulu, has taken a prolonged leave of absence from his practice, during which time he is planning to complete his graduate training in pediatrics in the east, chiefly in Boston. He plans to be gone about two years.

The Kapiolani Hospital of Honolulu announces the addition to its resident staff of DR. ARTHUR L. HARVEY, a native of Winnipeg, Manitoba, Canada. Dr. Harvey was graduated from Manitoba Medical College in 1946. He spent considerable time in the Royal Canadian Army Medical Corps prior to this. He served two years as a resident in the Victoria Hospital, Winnipeg, specializing in obstetrics and gynecology.

The St. Francis Hospital, of Honolulu, announces the addition to its resident staff of DR. FRANCIS WON, a graduate of Platten University in 1948. Dr. Won is a native of Honolulu; DR. BERNARD BOIDE, a graduate of Nuevo Leon Medical School, in Monterrey, Mexico; and DR. ROBERT BALLARD, JR., a graduate of George Washington University Medical School in 1948, and a native of Washington, D. C.

The Children's Hospital has a new chief resident in pediatrics, DR. LIN T. CHUN. He is a native of Hilo,

Hawaii, and was graduated from the Jefferson Medical College in 1944. His internship was at the Lankenau Hospital, in Philadelphia, following which he served in the U. S. Army Medical Corps.

Maui

Following the addition of a new wing to the Puunene Hospital, operated by the H. C. & S. Co., Ltd., the Paia Hospital of the Maui Agriculture Co. has been closed and the staff has moved to the Puunene Hospital. DR. FRANK ST. SURE, JR., is the chief of staff and his associates are DR. WILLIAM B. PATTERSON, DR. JOHN SANDERS, DR. EDWARD B. UNDERWOOD, DR. ROBERT COLE, DR. GUY S. HAYWOOD, DR. ALFRED BURDEN and DR. HAROLD KUSHI.

DR. AND MRS. JOHN SANDERS of Paia have announced the birth of their third child, Margaret Lawler, who was born April 23, 1949.

DR. A. J. BELAND is on leave from the Kula Sanitarium, where he was on the staff, and is now at the Veterans Hospital, Louisville, Kentucky, completing a residency in surgery.

DR. EDMUND TOMPKINS, director of the Kula Sanitarium, is spending three months on the mainland.

DR. AND MRS. HAROLD KUSHI, of Wailuku, Maui, have announced the birth of their third daughter, Patricia Ann, born August 2, 1949.

Molokai

DR. SAU KI WONG, of Honolulu, has recently moved his office to Kaunakakai, where he is practicing general medicine and surgery. Dr. Wong is a graduate of Jefferson Medical College, in Philadelphia, and interned at the Grasslands Hospital, in New York. He recently completed seven months' residency in the St. Francis Hospital before going to Molokai to take up his practice.

Hawaii

DRS. CLYDE PHILLIPS AND M. H. CHANG have been appointed government physicians for Hilo since the resignation of Dr. S. Kasamoto effective the first of July, 1949.

DR. ARCHIE ORENSTEIN became a father-in-law on July 12 when he gave his daughter, Miss Georgianne, away in marriage to Mr. David Garst.

DR. WALTER LOO won second place in the Pro-Amateur Golf Tournament held on July 23-24 at the Hilo Country Club.

DR. J. MATSUMURA recently discontinued operation of his private hospital and now is on the staff of Hilo Memorial Hospital.

DR. PETE OKUMOTO is assisting Dr. Donald Depp of Olaa Hospital part-time since Dr. Cunningham left Olaa for Pahala Hospital where he replaced Dr. Slaten.

NEWS

Plantation Physicians

Dr. William Patterson of Puunene, Maui, president of the Territorial Association of Plantation Physicians, cordially invites all the members of the Hawaii Territorial Medical Association to attend the annual meeting of T. A. P. P. November 17 to 20, 1949, at Puunene. Several outstanding visitors will take part in the program. Inspection of the new Puunene Hospital will also be made. Write to Dr. Patterson for accommodations if you expect to attend.

Honolulu Surgical Society

At the August meeting of this Society the group was addressed by DR. LESTER YEE, who spoke on surgical diseases of the chest with particular reference to pre- and post-operative care, and CHRISTOPHER J. HAMRE, who delivered an interesting address on the formation of dilated bile ducts in rats by a diet deficient in Vitamin A. DR. JOSEPH E. STRODE discussed many observations from his recent trip to the mainland, where he visited surgical clinics and the meeting of the American Surgical Association; DR. THOMAS BENNETT described some interesting papers from a recent meeting of the Neurosurgical Society of San Francisco; DR. ROGERS LEE HILL spoke on general and specific observations from his recent trip to the mainland, during which time he visited twenty-four states.

The Hawaii Council of the Pan-Pacific Surgical Association met on July 22, 1949. The report of the auditors, Cameron and Johnstone, employed to audit the account of the 1948 Congress, was unanimously accepted. Copies have been forwarded to the non-resident members of the Council.

The Council directed that a summary report of the proceedings of the 1948 Congress be circulated in mimeographed form. The abstracts of papers presented are now in the process of being mimeographed and copies will soon be forwarded to all who registered at the 1948 meeting.

F. J. HALFORD, *Secretary*
Pan-Pacific Surgical Association

Dr. Leona Baumgartner New Associate Chief of Children's Bureau

Promising encouragement to communities in building better health services for their mothers and children, Dr. Leona Baumgartner took office on June 2 as Associate Chief of the Children's Bureau, Federal Security Agency. Serving under Katharine F. Lenroot, Chief of the Children's Bureau, Dr. Baumgartner will have special responsibility for the Bureau's health services. She will administer the Bureau's $18,500,000 in annual grants to the States to extend and improve maternal and child health services and services for crippled children.

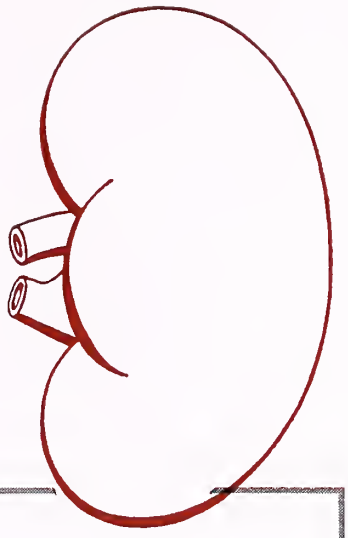
International College of Surgeons

The International College of Surgeons, United States Chapter, will hold its fourteenth Annual Assembly and Convocation in Atlantic City, New Jersey, November 7, 8, 9, 10, 11, 12, 1949, according to David B. Allman, M.D., Atlantic City, Chairman of the Assembly.

The program will include scientific sessions on subjects in the fields of general surgery; eye, ear, nose and throat surgery; gynecology and obstetrics; urology; and orthopedic, thoracic, plastic and neurological surgery, as well as special surgical clinics held in Philadelphia hospitals on November 7. Doctors interested in surgery and its advancement are invited to attend, and can obtain a program upon request to Arnold S. Jackson, M.D., Secretary, Jackson Clinic, Madison 4, Wisconsin. For hotel reservations, contact E. D. Parrish, Haddon Hall, Atlantic City, New Jersey.

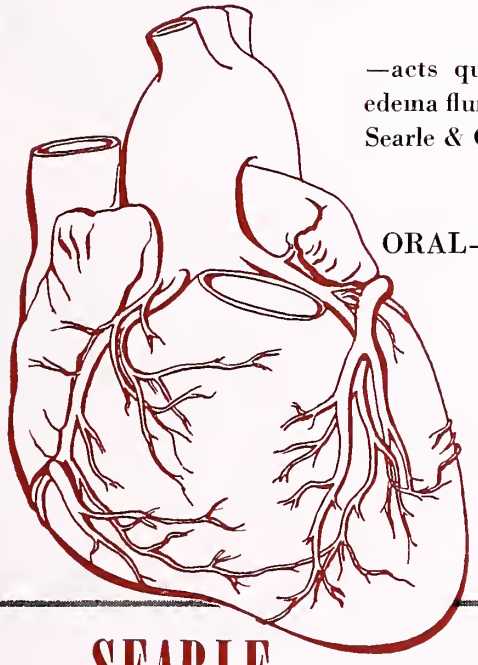
To increase sodium excretion

"Thus it becomes apparent that Aminophyllin is a diuretic agent in that it can mobilize and excrete fluid and sodium even in the face of decreased intake."[1]



ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

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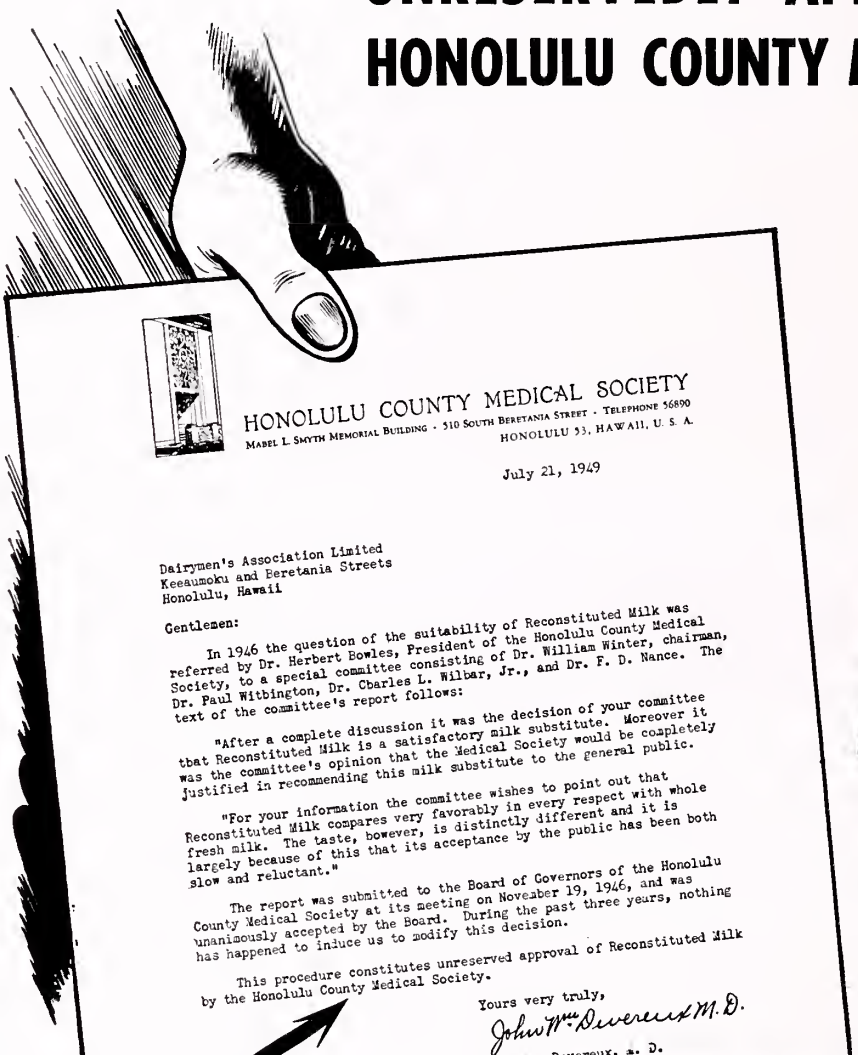
ORAL—PARENTERAL—RECTAL DOSAGE FORMS

Searle Aminophyllin contains at least 80% of anhydrous theophylline.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

1. Brown, W. E., and Bradbury, J. T.: The Effectiveness of Various Diuretic Agents in Causing Sodium Excretion in Pregnant Women, Am. J. Obst. & Gynec. 56:1 (July) 1948.

UNRESERVEDLY APPROVED BY THE HONOLULU COUNTY MEDICAL SOCIETY



HONOLULU COUNTY MEDICAL SOCIETY
MABEL L. SMYTH MEMORIAL BUILDING · 510 SOUTH BERETANIA STREET · TELEPHONE 56890
HONOLULU 53, HAWAII, U. S. A.

July 21, 1949

Dairymen's Association Limited
Keeaumoku and Beretania Streets
Honolulu, Hawaii

Gentlemen:

In 1946 the question of the suitability of Reconstituted Milk was referred by Dr. Herbert Bowles, President of the Honolulu County Medical Society, to a special committee consisting of Dr. William Winter, chairman, Dr. Paul Witbington, Dr. Charles L. Wilbar, Jr., and Dr. F. D. Nance. The text of the committee's report follows:

"After a complete discussion it was the decision of your committee that Reconstituted Milk is a satisfactory milk substitute. Moreover it was the committee's opinion that the Medical Society would be completely justified in recommending this milk substitute to the general public.

"For your information the committee wishes to point out that Reconstituted Milk compares very favorably in every respect with whole fresh milk. The taste, however, is distinctly different and it is largely because of this that its acceptance by the public has been both slow and reluctant."

The report was submitted to the Board of Governors of the Honolulu County Medical Society at its meeting on November 19, 1946, and was unanimously accepted by the Board. During the past three years, nothing has happened to induce us to modify this decision.

This procedure constitutes unreserved approval of Reconstituted Milk by the Honolulu County Medical Society.

Yours very truly,

John Wm. Devereux M.D.

John Wm. Devereux, M. D.
Secretary

JWD:af



Dairymen's Recombined* Milk
The economical milk with the full food value of fresh, whole milk. The "good buy" your patients are looking for today. Let them know it's medically approved.

This procedure constitutes unreserved approval of Reconstituted Milk* by the Honolulu County Medical Society.

*Reconstituted Milk is now called Recombined Milk

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ASSOCIATION, LIMITED
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1. Tear-off tab, pulled out and down, releases outer metal cap, which is then easily removed.



2. Metal identification disc lifted off, revealing indentations in rubber diaphragm which provide exclusive evidence that seal is unbroken since sterilization.

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3. Additional assurance of safety provided by the characteristic sound when protective vacuum is broken upon removal of diaphragm.



4. After inverting bottle to moisten stopper holes, sterile administration set plugs easily and securely into pear-shaped outlet hole of the stopper.

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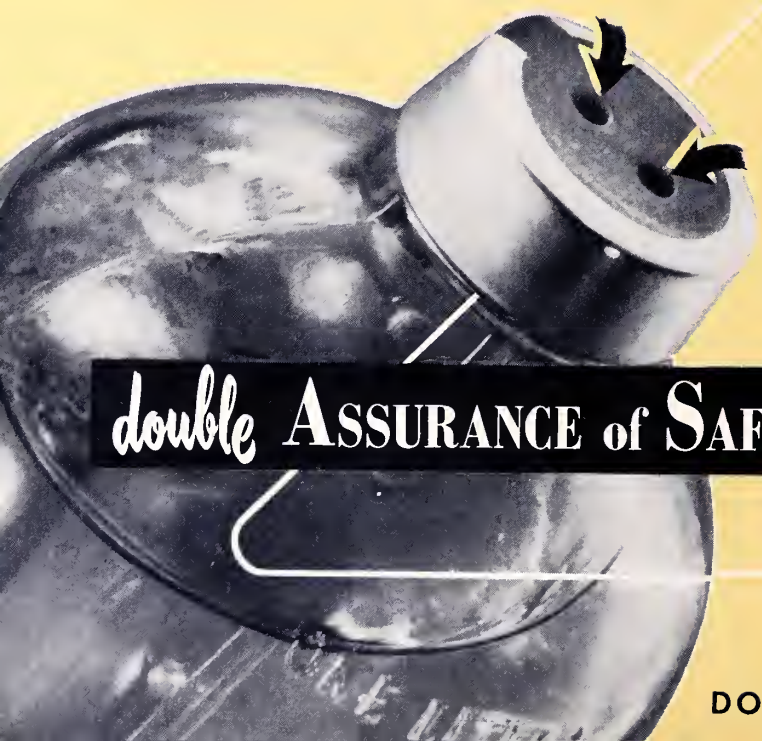
Above all, the solutions you use must be *sterile.* In Vacoliter containers, solution sterility has been protected successfully—and exclusively—since 1931 by the two-way sealing action of the stopper. (1) *Laterally,* elasticity of the rubber stopper forces a pressure seal with the inner wall of the bottle neck. (2) *Vertically,* the inner aluminum seal clamps the stopper flange tightly against the top rim of the bottle neck, forcing the rubber into microscopic indentations that exist even in perfectly-moulded glass.

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To assure you that each Vacoliter solution reaches the bedside as safe for use as when it left the laboratory, the Baxter closure provides exclusive double evidence: (1) the twin indentations in the rubber diaphragm, (2) the characteristic sound when the protective vacuum is finally broken, as the diaphragm is lifted for administration of the solution.



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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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HAWAII LEAGUE OF NURSING EDUCATION

Report of the President

Swift social, political and economic changes have created new demands on nursing. Nursing is a social profession; therefore, nurses must be given that type of preparation which will enable them to meet the needs of society and adjust themselves to changing trends.

We as nurse educators must set forth a new pattern of nursing education by providing a curriculum that will be in harmony with the newer aims and standards of general education and produce community-minded nurses. In order to prepare this type of nurse in accordance with the new pattern, we, ourselves, need to change our attitudes toward nurses and nursing. It requires some deep thinking and planning together to work out the new objectives; the setting-up of a new structure of organization; the outlining of a program of study for the preparation of faculty members as well as providing a curriculum for nurses choosing either the practical, technical or professional career.

The National League of Nursing Education has accepted this modern concept of nursing. One recent evidence is the change in eligibility for membership. The day has passed when only people directly connected with a school of nursing or those holding a position of a certain title comprised the membership. Now, any person performing the function of teacher, supervisor, or administrator in any type of organization may become a member. In addition, many more lay members are listed in the ranks of the League.

There are many other evidences of changes, as indicated by recent surveys, institutes, conventions and professional literature, of which we are aware. Our job today is to consider how we as nursing leaders in Hawaii, regardless of the positions we hold, can take our place as an integral unit of the National organization and do our part to make nursing one of the leading vocations and professions. As we are now leaving "the baby stage" we have the advantage over older organizations in that we have developed our thinking along with the modern viewpoint.

There has been, since our organization was started, marked progress and the committee reports will verify this statement. Our membership has increased; the new concept of nursing has been introduced through the Brown Report, Ginzberg Report and an Institute conducted by a Senior Officer of the United States Public Health Service. We realize that we have only skimmed the surface and now we are ready to burrow deep in between the shells.

As I see it, and I am basing my statements on the current trends of the work of the National League and the present demands on nursing, the Hawaii organization has three major goals for which to work: First, to recruit every possible member in the entire Territory of Hawaii regardless of how remote their location, and give each a specific job to do through a specific process of communication; second, to plan a program to keep each League member informed of the changes taking place in the whole field of nursing and the ways in which the problems are being met throughout the mainland; and third, to use all possible means and sources to get our schools of nursing on a collegiate or university level. If these three goals seem difficult to some of you, may I say that many states are envious of our fertile grounds and opportunities. The facilities,

location and organizational set-up we have here, to say nothing of the climate and the beauties of nature, are far superior to many of our sister organizations. Our national officers and Board of Directors are expecting us to be leaders, for only through good leadership will we have good followers.

May I, as president of the Hawaii League of Nursing Education, suggest some groundwork plans which are secondary in assisting us to reach these three goals?

1. Sell the Hawaii League of Nursing Education as a community organization to all closely related groups and to our community. This may be done through an active public relations committee working with radio, newspapers, business organizations, community clubs and Foundations. Enroll many lay members of all groups in the community. Seek the interest of the medical groups by asking them to work on curriculum committees in setting up teaching programs in our schools of nursing.

2. Encourage League members to write and see that the articles are published not only in the local but also national professional journals.

3. Analyze the curriculum in all of our schools, reevaluate it, include the practical nurse, the basic nursing professional program and the graduate nurse and give special consideration to the following:

a. Ways in which the care of the aged and the chronically ill may receive more emphasis.

b. A set-up for using the community as a laboratory. If nurses are to serve the community, they must learn about the community in the community.

c. Methods through which good nursing schools can be utilized to provide better care of patients and to enlarge the student's concept of child care.

d. Use of study conferences, discussion groups and staff education programs, consultation services and specific courses to make up the deficiencies of our faculty so that it will be possible to produce the type of nurses needed to meet the new demands. For example, all the teachers should be well informed about the types of examinations given to our students in the Territory so that they will be able to use methods and content that will enable the students to meet the requirements.

e. Immediate planning on the ways and means of sending a large delegation to the Convention this coming Spring. There were three delegates at the Convention in Cleveland in May 1949. There should be at least twelve delegates in California in 1950, or many more if possible. (There were two members of the League at the International Convention in Sweden this year.)

f. Planning of a tour to Hawaii following the biennial convention. Several mainland people have asked for this tour. Then too, it is not so far-fetched to think in terms of inviting the National Organization to meet here in the near future.

There are many other things that I could point out but I would like to emphasize a last important step to take, which was emphasized at the Convention in Cleveland in May 1949. We as League members or as nurse educators are no longer just interested in nurses but in NURSING. This means that we are interested in (1) the graduate nurse who is trying to find the position for which she is best qualified; (2) the young girl who desires and is qualified to enter the new type of integrated collegiate or university program; (3) the young girl interested in entering a school with the three year basic program; and (4) the girl or woman who has the spirit of nursing and is qualified for the practical nurse school. We salute them whatever vocation or profession they choose. We are prepared and should do everything possible to counsel properly.

Now what does this imply? Simply this, if we are conscientious League members we are interested in every type of nursing in Hawaii and we will fall in line with the National group and set up a committee called "Careers for Nursing." The committee should be headed by a neutral chairman with membership including graduate nurse education, public health, practical nurse, basic professional program, collegiate or university program, general education and community representation. It will be the function of this committee to obtain authentic information through various channels and disseminate it to all the islands and the community via a central headquarters. Another of the functions will be the recruitment of nurses on a Territorial level. To prevent any misunderstanding may I emphasize that the League serves the entire community because its membership comprises individuals in various types of nursing in the community and is thus not to be an individualized program. However, any organization has the right to carry on its own program of recruitment and the "Careers for Nursing Committee" will not interfere with that program.

I urge each local President to recruit every eligible member in her organization to live up to the League and function as the education group in the local organization. The Hawaii League of Nursing Education is the official education committee of the Territorial Nurses' Association. Therefore let us carry that responsibility. The day is rapidly passing when nurses are labeled hospital nurses, public health nurses, school nurses, etc. We are living in a new era . . . "We are in the field of nursing."

Let us pledge ourselves to work together for nursing in such a way that we will make our parent organization continue to respect us as one of the most promising units of the National League of Nursing Education.

Thanks to each and everyone for your cooperation and assistance during this past year. My very best wishes go to each one of you.

ANNE M. FISHER, *President*

REPORT OF THE BOARD FOR THE LICENSING OF NURSES

*Occupational Distribution of Professional Nurses, Territory of Hawaii**
Fiscal Year ended June 30, 1949

LOCATION	PUBLIC HEALTH	PRIVATE DUTY	INSTITUTIONAL	INDUSTRIAL	OFFICE	SCHOOL NURSING EDUCATION	OTHER	NOT WORKING	TOTAL
C&C Honolulu	60	120	385	30	89	18 27	25	291	1045
Hawaii	14	10	70	5	3	4 0	3	25	134
Kauai	9	4	24	3	0	0 1	2	23	66
Maui	10	2	47	5	2	1 0	2	21	90
Molokai	1	0	14	1	1	0 0	0	1	18
Lanai	0	0	2	1	0	0 0	0	2	5
Out of Territory									314
	94	136	542	45	95	23 28	32	363	1672

* (Re-registration figures only, there being no record kept of occupations of nurses licensed by examination or reciprocity.)

*Occupational Distribution of Practical Nurses, Territory of Hawaii**
Fiscal Year ended June 30, 1949

LOCATION	INSTITUTIONAL	PRIVATE DUTY	OFFICE	DISPENSARY	INDUSTRIAL	OTHER	NOT WORKING	TOTAL
C&C Honolulu	277	34	102	1	1	6	26	447
Hawaii	125	1	12	5	0	1	5	149
Kauai	42	1	4	13	2	0	1	63
Maui	46	3	2	3	3	0	3	60
Molokai	9	0	1	0	1	1	0	12
Out of Territory								5
	499	39	121	22	7	8	35	736

* (Re-registration figures only, there being no record kept of occupations of those licensed by examination or waiver.)

Report of Registrations for the Fiscal Year ended June 30, 1949

SUMMARY OF LICENSES GRANTED

	1948	1949
Professional Nurses		
By re-registration	1,472	1,672
By examination	52	52
By reciprocity	380	267
Total	1,904	1,991
Practical Nurses		
By re-registration	424	736
By examination	25	42
By waiver	413	234
Total	862	1,012

MABEL SMYTH BUILDING BOARD OF MANAGEMENT

Report of the Nursing Representatives

Again it is time to give you a resume of the activities carried on in the Smyth Building for the past fiscal year. This has been a very busy year for our building and much has been accomplished in the way of cleaning, refurbishing and redecorating.

As was planned when our last report was made, extensive redecoration and refurnishing has been completed. A new rug has been laid in the Alice Yates Room, the furniture has all been re-upholstered in the Alice Yates Room and the lanai, tables have been refinished and the tops fitted with glass, and new drapes have been placed in the lounge, Nurses' Association offices and the Nursing Service Bureau. New fluorescent lighting fixtures have been installed for all offices in the building.

Interior walls have been cleaned; the building has been termite treated and a contract has been let for future termite control. The exterior window casings, fire escape and other metal parts have been rust-proofed and painted.

Rentals for offices in the building have been raised, after a recent survey by an impartial person from Hawaiian Trust Company who recommended the proposed raises.

The Board invites more participation and use of the building by member agencies and individuals of these agencies.

Upon return of the Building Manager from leave, the position of Manager was made full time, as activities in the building require full time services.

Nurses and doctors may give private parties in the building and other organizations may give luncheons, teas, etc., at the discretion of the Board and Building Manager. In addition to the other privileges, the auditorium, lounge and the Stella Lowry Room are rented frequently by commercial enterprises or related health and welfare agencies.

Future plans for the building include installation of new sound equipment in the auditorium, new carpet for the auditorium, complete set of new lamps for the Alice Yates Room and other repairs as needed.

Still further in the future looms the need for enlargement of the Medical Library and more office space. Financing such a large project can-

not be attempted, however, unless funds and perhaps gifts make such expenditures possible.

Following is a summary of First Floor activities during the year:

		PERSONS PRESENT
Number of times auditorium used..	286	35,393
Number of committee meetings.....	260	2,579
Number of lunches served.....	15	756
Number of dinners served.....	1	13
Number of refreshments, teas, cocktails, etc.	59	4,341
Number of times Alice Yates Room used	21	910
Total	642	43,992

AGNES V. PETERSON, *Chairman*
MYRTLE SCHATTENBURG

NURSING SERVICE BUREAU

Report for the Fiscal Year ended June 30, 1949

Calls for Nurses

	PROFESSIONAL		PRACTICAL	
	Calls	*Filled*	*Calls*	*Filled*
1948 July	361	292	45	33
August	349	277	22	12
September	322	256	19	14
October	275	259	20	16
November	304	269	24	21
December	335	290	38	28
1949 January	396	311	32	18
February	327	274	30	21
March	386	326	31	24
April	350	314	25	19
May	378	309	34	25
June	347	246	39	37
TOTAL	4,130	3,423	359	268

MEMBERSHIP COMMITTEE REPORT

Members of the Territorial Nurses' Association membership committee for the past year were:

Mildred Manty, Maui
Roberta Lindberg, Hawaii (resigned)
Elizabeth Middleton, Kauai
Aiko Yano, Kuakini Hospital
Mildred Asato, Queen's Hospital
Marjorie Namiki, St. Francis Hospital
Frances Kupau, Children's Hospital
Anne Chang, Leahi Hospital
Audrey Scales, Kapiolani Hospital (resigned)
Esther Higuchi, Private Duty
Rose Sakakida, Office Nurse
Emilia Centeio, Public Health

Committee members on all islands were contacted by mail and methods of approaching members and materials used in promoting membership were discussed. A mimeographed pamphlet listing the four district associations and outlining some of the benefits gained from membership in the Territorial association was used in recruiting new members and in encouraging renewals. Itsuko Tokumaru executed the drawings for the pamphlet.

Since the dues were raised from $12 to $21 in 1949, it was expected that the membership might drop. Our goal, therefore, was to maintain the same membership as in 1948. The following table shows our standing as of August 15, 1949:

	1948	1949	FEWER	NEW MEMBERS	RE-NEWALS
Honolulu	601	502	99	100	402
Maui	61	54	7	6	48
Kauai	43	43	....	11	32
Hawaii	89	63	26	6	57
	794	662	132	123	539

As of August 15, 50.3% of nurses living in the Territory and actively engaged in nursing were members of the Association, according to figures obtained from the Board for the Licensing of Nurses. At the end of the fiscal year, June 30, 1949, there were 1677 nurses licensed and living in the Territory. Of this number, 363 were listed as not working.

Kauai Association

The membership rate on Kauai should not be compared with that of other districts since individuals did not pay the increase in dues and this was a factor in the other districts. The Kauai Nurses' Association has been active in raising money throughout the year and the treasury paid the dues increase for the entire membership.

Maui Association

Nurse employing agencies have been encouraging nurses to join the Association. Lanai and Molokai are part of the Maui district but close cooperation is difficult. It was suggested that the nurses on these islands attend one or two meetings a year on Maui.

Hawaii Association

The fact that the nurses on Hawaii are widely scattered makes it hard for the membership committee to contact everyone.

Honolulu Association

The Territorial membership committee worked closely with the district association committee in order to avoid duplication. As in the past, membership proved to be lowest in hospitals where there is a large transient group of nurses. The names of members who had not renewed were given to members for contact. Of 214 names, 102 had left for the mainland, 24 could not be reached, 25 were inactive, 8 refused because they felt dues were too high.

We feel that a large membership committee representing all fields of nursing is essential for all district associations in order to make personal contacts. The committee feels optimistic for the future and believes that having an executive secretary who can demonstrate the worth of a counseling and placement program for the Association will make more nurses see the worth of belonging to the Association.

DOROTHY H. Y. TONG, *Chairman*

REPORT OF THE LIBRARY COMMITTEE, 1948-49

The Library Committee, comprised of Miss Sadie Ching, Miss Etta Hou, Miss Yoshiko Shimoda, Miss Anne Chang and Miss Virginia Null, has held three meetings since its last report to the Nurses' Association.

The Committee compiled a list of desirable and essential additions to the library amounting to approximately $140.00. This list was approved in its entirety by the Board and the books are being purchased through the Margaret Jones Memorial Fund.

An attempt has been made to set up a good directory of schools, including undergraduate and postgraduate. For this purpose 25 schools of nursing and ten departments of nursing education on the mainland have been requested to put Mabel Smyth Library on their regular mailing list.

The Committee asked the Board for permission to select and review library books for the Territorial Bulletin. This has been arranged and all such books are being reviewed under the guidance of the Library Committee.

VIRGINIA M. NULL, *Chairman*

REPORT OF THE MARGARET JONES MEMORIAL FUND COMMITTEE

The Margaret Jones Memorial Fund was established in 1917 by the Nurses' Association, which was then known as the Honolulu Nurses' Club. The fund was named in memory of Miss Margaret Jones, a private duty nurse who lost her life in the submarining of the S.S. Lusitania in 1915. During her life Miss Jones was known "to help from time to time less fortunate nurses."

The early purpose of the fund was to provide hospital care and general relief for "needy nurses." In 1937 the purpose was enlarged to include donations and loans for educational purposes. Substantial additions have been made to the fund at various times through bequests and other gifts. Only dividends from the investments may be expended. A revolving fund of $2000.00 is maintained from which loans may be made. Increases to the fund above this sum are re-invested to increase the yearly income.

Throughout the years many demands have been made on the fund, demonstrating its value to the Association. Any member of the Territorial Association is eligible to borrow from the fund and application blanks may be obtained from the Nurses's Office in the Mabel Smyth Building.

For the year 1948 gross income from dividends and interest was $1070.34; expenditures were $466.23, creating an increase of $604.11 in the fund. No loans were made during the year. (The complete financial statement is on file with the treasurer of the Association.)

During the first six months of 1949 one loan of $500 was made for educational purposes and has been repaid. At the end of June outstanding loans amount to $365.

$1500.00 was invested in Government bonds early in 1949 and $1000.00 was paid on the $5000.00 pledged to the Medical Library Endowment Fund. To date $2000.00 has been paid. The fund has also provided approximately $130.00 worth of new books and other materials for the nurses' section of the Medical Library during 1949.

MARGARET MAKEKAU, *Acting Chairman*

REPORT OF THE COMMITTEE ON COUNSELING AND PLACEMENT

At the last annual meeting of the Nurses' Association, Territory of Hawaii, the need for a committee representative of the various specialties in nursing, to serve in an advisory capacity to the executive secretary in matters pertaining to individual nurses, was recognized by the Board of Directors. Consequently, a committee known as the Counseling and Placement Committee was born.

Great effort has been made to get representative membership on the committee. However, this has not always been possible and at present the committee is composed of representatives of the League of Nursing Education, hospital administration, school nursing, private duty, and public health. We would like to have a representative from the general duty section, an office nurse, and an industrial nurse as well as representatives from any other groups which are part of the Territorial Association.

Activities to date have been primarily focused on the Nursing Service Bureau and the Physicians' Exchange since the former Nursing Service Bureau committee was dissolved.

There has been a change in the personnel in the Bureau and the committee recommended the use of non-nurses in these positions for several reasons, one of which is that the committee believes it would be economically more feasible. We believe we could hire personnel with business training and in addition to answering telephone, etc., they could take care of much of the office work. (The bookkeeping and some other functions have been transferred to the office of the Territorial Association.) This plan was heartily disapproved by the private duty section and at present we are still employing graduate nurses in the Bureau.

Every attempt has been made to consider recommendations and suggestions of the various groups affected by Bureau policies.

Policies for the personnel in the Bureau and also for the Private Duty members of the Bureau have been developed. These were worked out with representatives of the Private Duty Section. These policies will be reviewed at least on an annual basis and oftener if necessary.

At the time of the writing of this report, the committee is working on the policies to cover the practical nurse group.

Efficiency report forms have been made and each member of the Bureau staff, after permanent appointment, will be rated annually. This rating will be made after information from several sources has been accumulated. It will be discussed with the individual by the executive secretary or by a member of the Counseling and Placement committee.

An attempt is being made to do annual evaluations on each professional and practical nurse on the Bureau. This we believe has at least two valuable functions:

1. The individual nurse is informed of her ability as a nurse as seen by those for whom she works;
2. The Bureau can supply better nursing service to the community by knowing the relative potentialities of the nurse members.

In doing this evaluation we expect to get information from at least one hospital, one or more doctors, other nurses, and other sources as may be indicated. Such information will reflect the over-all attitude of the nurse as well as her ability. We hope to enlarge our membership in all branches through good service to the individual members and to the community.

Last, but not least, counseling on a limited basis is now being carried on with some of the private duty nurses. This is being done on an individual and confidential basis.

ESTHER M. STUBBLEFIELD, *Chairman*

A COMMUNITY HEALTH SERVICE

PAULINE KIFER, R.N.*

Because The Queen's Hospital School of Nursing recognized a need for the students to understand the patient in relation to the community, a new educational program was developed. We believe that a student will give more intelligent nursing care if she does not think of the patient's present illness as an isolated event, but considers it in relation to his past and the future he has to anticipate. Our aim is to have the student realize that each person comes to the hospital with family and community relationships which are of vital importance in the formation of his attitudes and in the course of his recovery.

Since it was no longer possible to give our students an observation period with the Public Health Department, a program was designed to present community relationships to the student by means of home visitations and field trips to local agencies dealing with health and social problems. The student's introduction to Public Health is given in a four-week assignment in the Outpatient Department. The clinics include every age group of men, women and children in all major branches of medicine and surgery. Here, the student sees ambulatory patients in need of medical supervision taking advantage of the Outpatient Department's diagnostic and treatment facilities.

Two of the most valuable services of this Department are the Maternal Health Program and the Immunization Program for the prevention of communicable diseases. While assisting with these programs the student learns how to teach effectively and the value of teaching in the treatment of these patients.

An important phase of the Outpatient service for students is their instruction concerning the correlation of the community health agencies, such as the Department of Public Welfare, the public schools, Salvation Army, Juvenile Court, and the Territorial Health Department. She is taught the functions of each of these agencies and how she may best make use of them to help her patients.

After the Outpatient service, the student is assigned to eight weeks of Community Health Service during which she visits homes and social agencies. In setting up the program, it was felt

* Community Health Instructor, The Queen's Hospital, Honolulu.

that in order to give each student a similar experience, certain types of cases should be sought out for each student to visit in the home and care for in the hospital or the Outpatient Clinic. At least one patient in each of the following categories is selected:

Diabetes	Obstetrical and infant care
Hemiplegia	Surgical Dressing
Cancer	

Since the program is sponsored by the hospital, it serves all financial levels. Any patient from The Queen's Hospital or The Queen's Outpatient Clinic in the above categories may request community health nursing service.

The service may be requested by the attending physician or by the patient with the physician's approval. The nurse, at all times, works under the direction of the attending physician and is to report to him directly any important or unexpected changes in the condition of the patient. The requests for the service are received by the instructor; and, if in her opinion home visits will be beneficial to both the patient and the student, arrangements are made for the student to care for the patient in the hospital several days before discharge and then to visit in the home after discharge from the hospital.

In selecting patients for home visitation, we attempt to avoid those whose homes are already being visited by representatives of several agencies in order to avoid any conflict which might arise and thereby cause a breakdown of the rapport established by those organizations concerned.

Students, while on this service, are assigned to a definite medical or surgical department of the hospital. Theoretically, a student spends her day in three different but related types of nursing. Part of her day is devoted to caring for patients in the hospital who will soon be going home and have been selected for that student to visit. The second part of her day is spent in the Outpatient Department helping in special clinics. The third part of her day is devoted to home visits. The ideal situation is for the student to care for the patient in the hospital, visit him in his home and meet him again in the Outpatient Clinic when he returns for follow-up care or treatment. If the student is able to see her patients in all three situations, she should be impressed by the effect of the different environments upon the patient and the importance of considering each patient as an individual.

The instructor, who has had advanced preparation in Public Health Nursing, helps the student select suitable cases and spends a large part of her time in the district with her students to assist them in evaluating the home situations, the patients' reactions, the teaching which has been accomplished and the best approach in the homes to secure good rapport.

The service given to patients by The Queen's student is similar to that given by a visiting nurse. The students give and demonstrate bedside care so that the family may be prepared to assume responsibility wherever possible. They improvise equipment as necessary and attempt to teach the family nursing as it pertains to that particular situation. For example, in the instruction of the diabetic, the student teaches the testing of urine with simple home equipment, the aseptic injection of insulin, and regulation of the diet. The patient is taught how to keep records of his urine, insulin and diet even though in many cases, he may be unable to read or write.

Teaching of the patient by giving bedside nursing care is stressed. A student learns to teach her patients through simple demonstrations which are repeated often enough to make certain the patient or his family understands. The student learns to make use of the many social agencies by referring those patients who need emotional guidance or financial help to the agency which will be able to give them assistance.

The first home visit of each type is supervised by the instructor. When the instructor and student return to the hospital, the visit is evaluated and plans are made for the care of this patient. On succeeding visits, the student is permitted to carry through these plans. Supervision after the first visit is given whenever there seems to be a need for it.

Records are kept on all cases and are available in the office of The Queen's Outpatient Clinic. These records consist of reports of environment, family attitudes, observations, treatments, and medications ordered by the doctor. Summary sheets are kept daily and are evaluated at the end of each week to insure a varied experience. At the end of the service, the student studies the records to determine how successful she has been as a community nurse. Each student is asked to give her reaction to the program and to explain how she can apply the knowledge she has gathered to the nursing care she will give in the future.

This program has been in effect for a little over one year and has proved most interesting from all angles. After the first few months of adjustment, the program has functioned smoothly. Definite contributions have been made in giving care and instruction to those needing it as well as in rounding out the educational experience of our students. We have been particularly interested

in the reaction of our students. Many have made an effort to follow their patients for long periods and seem honestly interested and sincerely concerned about the developments that have taken place.

Although the program is not without its faults, we believe it is successful in making students think of illness in terms of its cause and the effect it will have on the future lives of their patients.

COMPULSORY HEALTH INSURANCE

In response to frequent requests for statements of policy on compulsory health insurance, the American Nurses' Association and the National Organization for Public Health Nursing have issued the following statement:

"The American Nurses' Association and the National Organization for Public Health Nursing are concerned with the maintenance and improvement of programs and facilities for public health services and complete medical care for all the people of the United States. They believe that: (1) the nursing profession exists primarily to serve the general public and is responsible for the provision of necessary nursing services to meet the needs of the public; (2) good nursing service is one essential of any effective health program and should be as readily available as the medical services; (3) governmental assistance is needed to make nursing services obtainable in all communities, rural and urban, and to people of all social and economic conditions, regardless of age, race, color and creed; (4) the nurse, as a private citizen, has the right and privilege of supporting or opposing any medical care plan, whether voluntary or compulsory; (5) the nursing profession must accept the responsibility of providing the necessary nursing services in any medical care plan which is established and supported by the general public, or by any special group or groups within the public. Non-acceptance is sanctioned only when a plan does not contain safeguards to insure high quality of nursing service.

"ANA and NOPHN, as organizations, do not support or oppose legislation to establish compulsory health insurance. They do urge the expansion of health programs and medical services, including nursing service, to meet the needs of the public. They have sponsored and supported the following principles regarding medical care plans:

The expansion of medical care plans with all necessary nursing service, including nursing care in the home, should be encouraged. In addition to voluntary effort, governmental assistance is necessary for attaining adequate distribution of health services. The consumer should decide what type or types of medical care plans, including insurance plans, should be encouraged."

AMERICAN JOURNAL OF NURSING BOARD REPLIES TO THE QUESTION OF INCLUDING THE PUBLICATION IN THE COST OF DUES

The following statement is based on (a) the results of the Journal's actual experience in including a reduced subscription rate with the dues of alumnae associations which elected to do so at a time when such associations were integral units of the ANA; (b) the long experience of the Journal's promotion consultant in the field of magazine promotion; (c) the business manager's experience and knowledge of the problems involved in keeping the records of nurses' subscriptions up to date.

It is assumed that the question is based on the notion that (a) a very large number of subscriptions can be fulfilled at a markedly reduced cost and that the members of an association will accept this reduced cost as a part of the cost of memberships. Apparently it is also assumed that more members will produce a higher revenue for advertising This is entirely dependent on the quality of the publication.

Magazines are assumed to have two sources of income: (a) Sale of subscriptions; (b) Sale of advertising space.

Official magazines which are provided for all members by allocating part of the dues to cover costs of the publication, generally speaking, are not considered desirable media by advertisers. "Forced circulation," they believe, includes a very considerable percentage of unread magazines which are therefore worthless to them. Paid circulation, especially when vouched for by the Audit Bureau of Circulation, represents the highest quality of circulation to the advertising fraternity. The income from advertising could not be counted upon to carry as high a percentage of costs as is now the case with, for example, the AJN.

An official publication which is not provided with membership is, of course, required to accept the policies and to promote the program of the organization it represents, but it must also satisfy its subscribers, else it would not have any. Tests of reader interest help to keep the editors on their toes by indicating the interests of the subscribers and the types of material they will, or will not, read.

A productive promotion program requires the direction at the national level of an experienced person skilled in the technics of promotion. Placing responsibility for promoting the sale of a publication in the hands of unskilled membership committees is futile. When undertaken by conscientious nurses it results in frustration.

The experience of the AJN in dealing with paid subscriptions of nurses (noted for their nomadic habits) clearly indicates that, if most nurses should really want an official publication conforming to a somewhat stereotyped pattern, the local units of the organization would have to assume far greater responsibility than has yet been the case, for maintaining thoroughly up-to-date membership lists and for *very* prompt forwarding of changes of address.

HAWAII COUNTY NURSES' ASSOCIATION

News Notes

WINIFRED GOLLEY, former supervisor of public health nurses on Hawaii, has been transferred to Honolulu. MARY JEAN MACDONAL is now supervisor.

ANNETTE HAMMERSLAND succeeded WINIFRED GOLLEY as President of the Nurses' Association.

MARY STANLEY has been named general chairman of a committee to conduct a rummage sale during August to raise money to send delegates to the Territorial Association convention in September.

ELIZABETH MIDDLETON and BARBARA DAVIS from Kauai were recent visitors on the Big Island.

MOIRA WILSON has recently returned from San Francisco for an indefinite stay.

ROSE HEE, recently transferred from Kapahulu Health Center in Honolulu, is now assistant supervisor of Public Health Nurses.

MARY ALLAN of Pepeekeo left in July to join her husband in Aberdeen, Scotland.

DOROTHY MURAKAMI and LAURA GIBU, who recently received Public Health Nursing Certificates from the University of Hawaii, have joined the staff of the local Health Department.

RUTH SAKAI, public health nurse in the Kohala district for the past twenty years, retired on August 1. She was honored at a buffet supper given by the Department of Health staff.

GLADYS PRINGLE, former public health nurse in Kona, has returned to the University of Hawaii for further study.

SIGNE CARLSON was married to Harold Luscomb on August 6 in Hilo.

MUTSUE TOMONAGA and KIYOKO TANAKA are new members of the Hilo Memorial Hospital staff. Both are graduates of The Queen's Hospital School of Nursing.

FUMIYO EBISUZAKI recently became Mrs. Yamanaka.

MR. AND MRS. JOHN HARBOTTLE (BETTY) have moved into their new home in Keaukaha.

LENORE MORI, formerly of Kona and a recent graduate of the University of Oregon Public Health Nursing School, is now public health nurse in Kohala.

MRS. FRED KOEHNEN, JR., the former CAROLYN OWENS, has returned from California where she was married in May.

SHIGEKO IZUMO was recently married to Sebastian Chang. They are making their home in Hilo.

LUCY PACKARD returned in July from a visit to the west coast.

MRS. ELEANOR PARK MOORE became the mother of a daughter in June.

MARTHA SHINODA, a recent graduate of Western Reserve University, Cleveland, Ohio, has joined the staff of Public Health Nurses in Hilo.

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1. Brewster, J. M., U. S. Naval Med. Bull. **49**: 1-11, January-February 1949.

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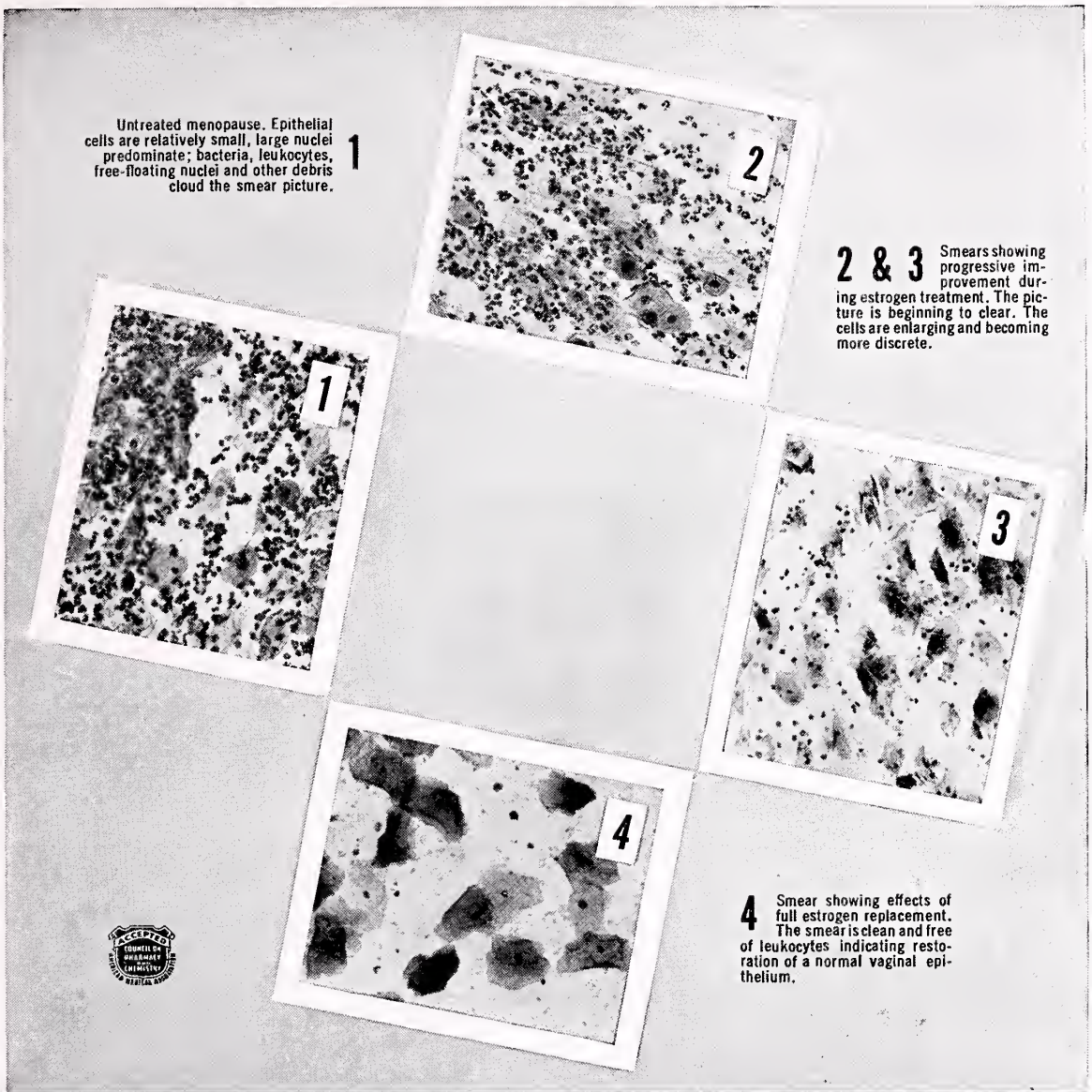
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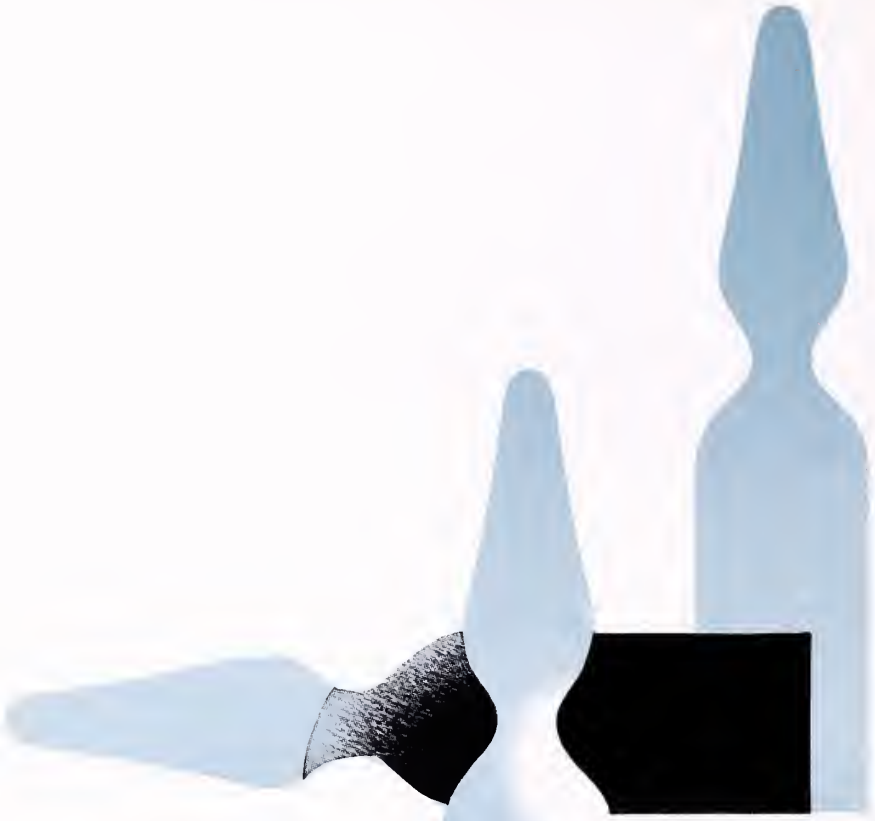
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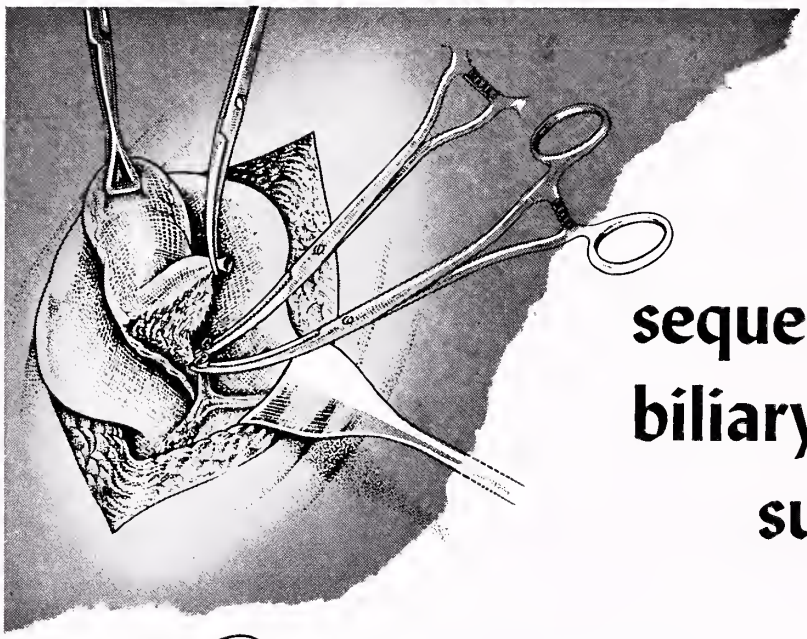


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[1]Krantz, J. C., Jr., and Carr, C. J.:
Pharmacologic Principles of Medical Practice,
Williams & Wilkins Co.,
Baltimore, 1949, pps. 114-119.

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1. Best, R. R.: Ann. Surg. *128*: 348 (Sept.) 1948.

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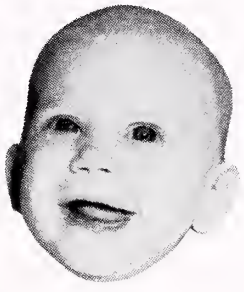


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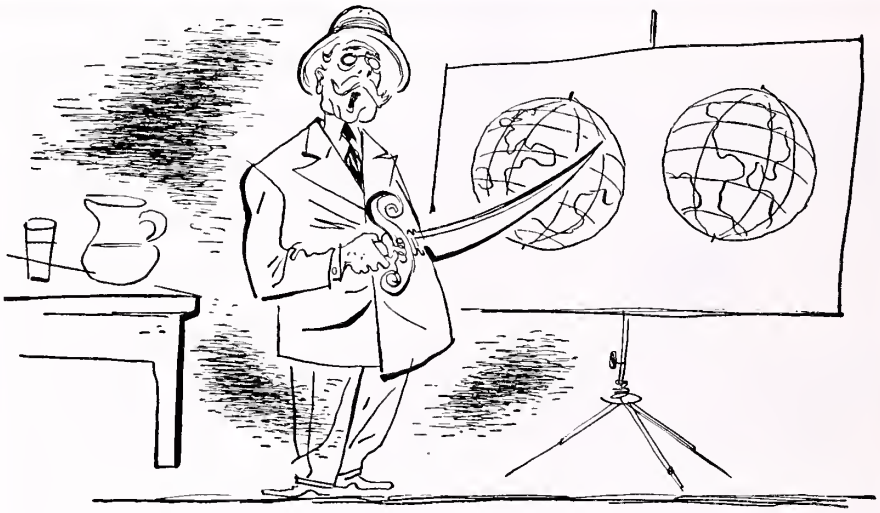
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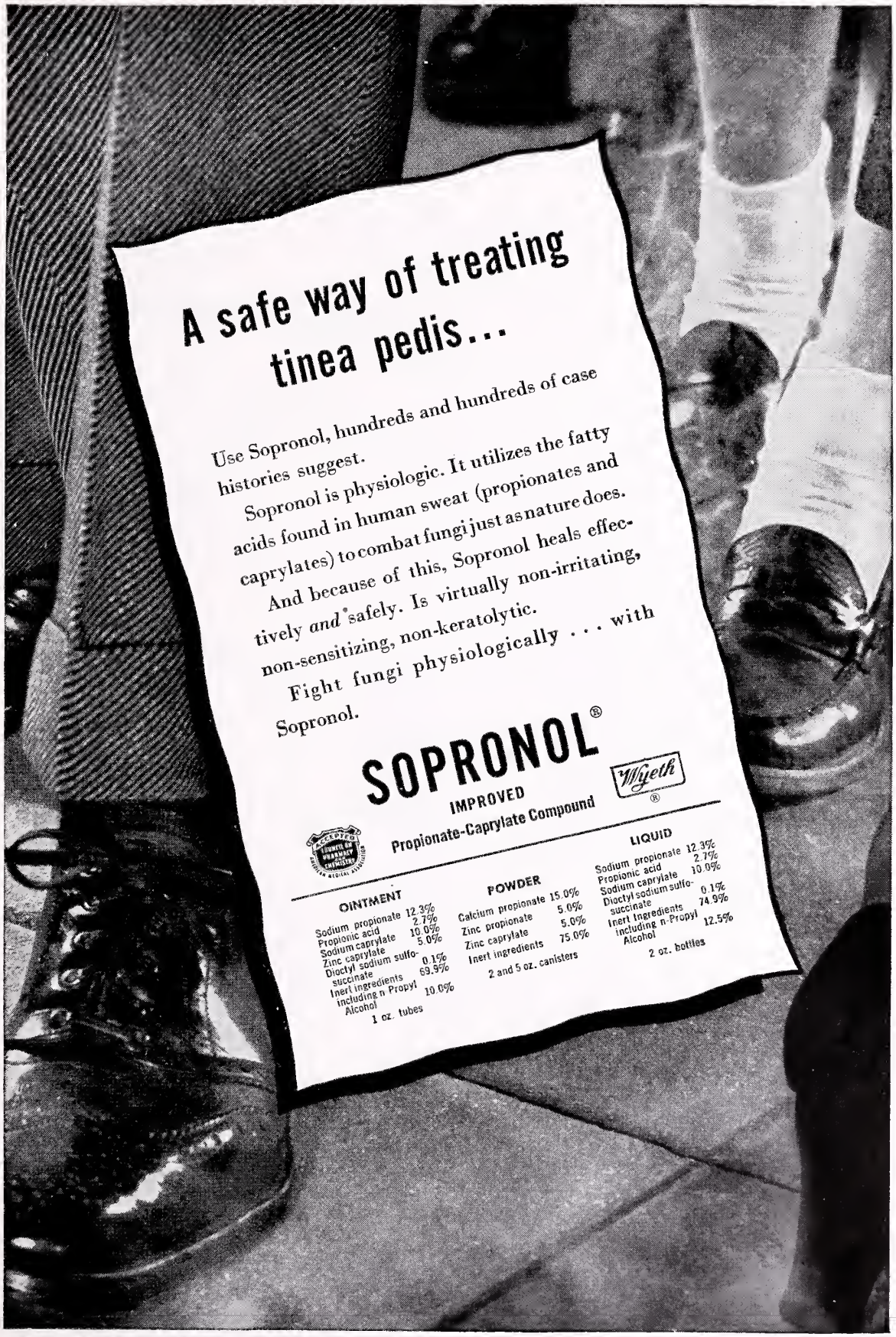
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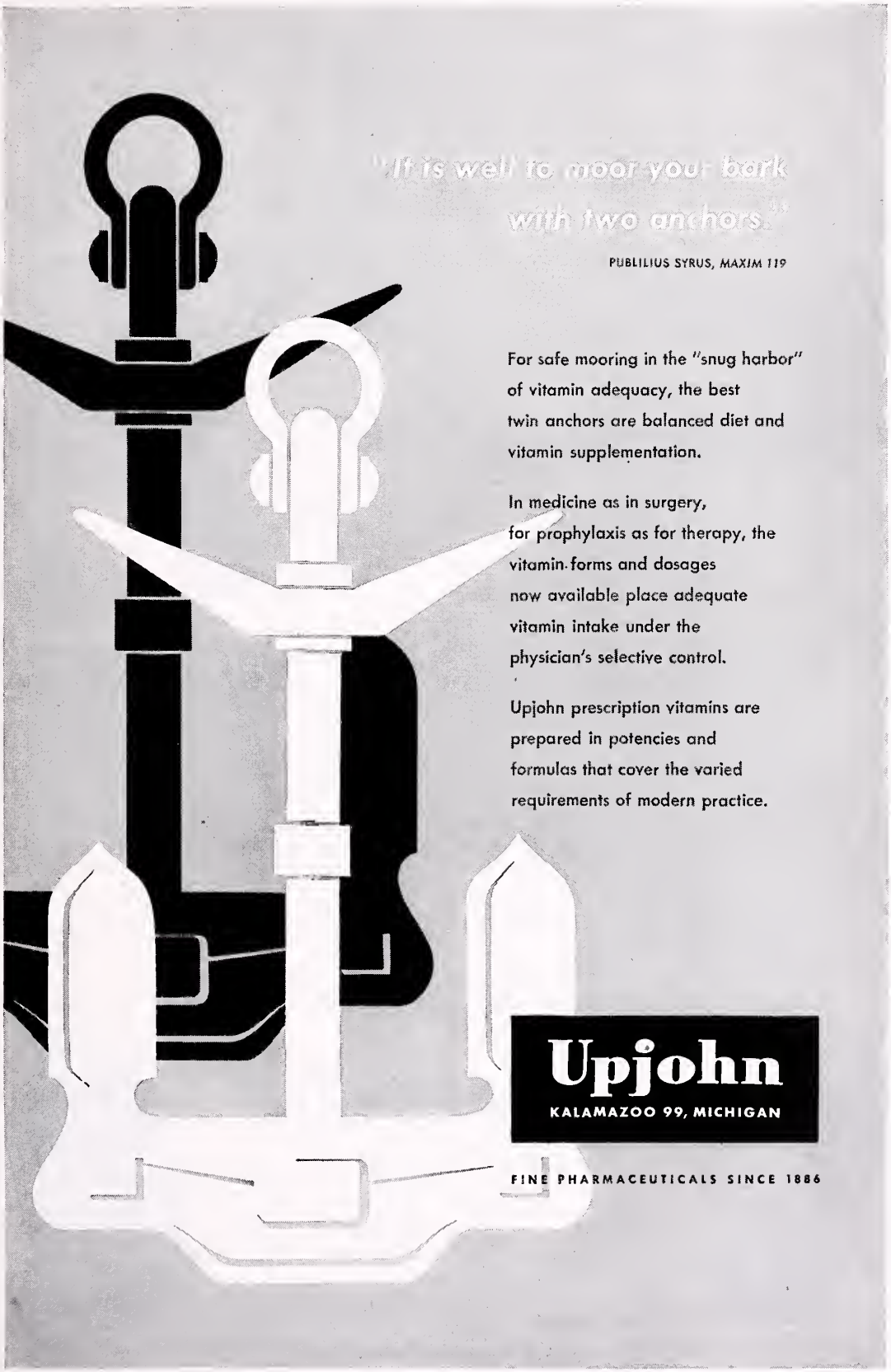
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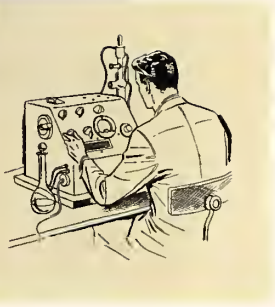
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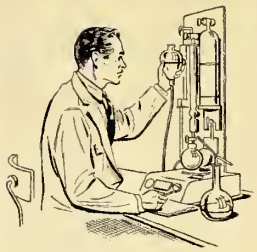
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Observations on Leptospiral Infections in Samoa

JOSEPH E. ALICATA, Ph.D.
HONOLULU

THE present report represents a brief study on the incidence of leptospiral infection among rodents on the island of Tutuila, Eastern or American Samoa (Fig. 1), carried out during August 1948. The observations were also extended to the possible occurrence of leptospirosis in the native population. This work was made possible through the cooperation of the Pacific Science Board of the National Research Council, the Bureau of Medicine and Surgery of the U. S. Navy, and the Naval Administration and Naval Medical authorities in American Samoa.

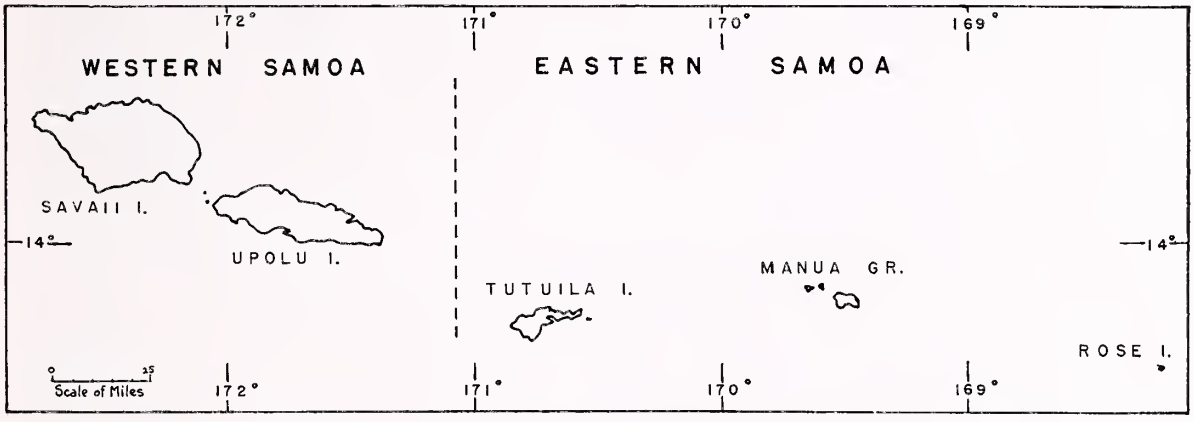


FIG. 1. Map of the Samoan Islands. Western Samoa is a Mandated Territory administered by New Zealand, and Eastern Samoa is a United States Territory, administered by the U. S. Navy.

The purpose of the investigation was to secure additional information on the geographical distribution and possible public health significance of the leptospirae in the Pacific Islands for which at the present time there is only limited information. Extensive studies have been made, however, in the Netherlands East Indies and a recent report[1] indicates that at least 18 different strains occur in that area. Preliminary studies conducted in Hawaii[2] and the Trust Territory of the Pacific Islands[3] point out the presence and importance of leptospirae in those islands. It is believed that the occurrence of high rainfall and abundance of rodents in most of the Pacific areas present factors which appear highly favorable to the presence and spread of the disease in nature.

The research in Samoa was believed to be of special interest for the reason that sporadic cases of "catarrhal" and "malignant" jaundice of unknown etiology make their appearance from time to time in both Eastern and Western Samoa. In reviewing the literature there appears to be only limited published information on leptospiral studies in Samoa. According to reports of the Government of New Zealand to the League of Nations[4] cases of malignant jaundice in Western Samoa have been suspected of being caused by leptospirae but none of the organisms had ever been found in man. Dr. J. C. Lopdell, Chief Medical Officer, Western Samoa, has informed me that considerable laboratory studies have been conducted to ascertain the cause of "malignant" jaundice, and that consideration had been given to the possibility of its being a form of leptospirosis. Dr. Lopdell is of the opinion that these cases of jaundice are possibly due to a virus of infective hepa-

Published with the approval of the Director of the University of Hawaii Agricultural Experiment Station as Technical Paper 183.
Submitted for publication July 25, 1949.

[1] Collier, W. A.: Die Verbreitung der Leptospiren in Niederlandisch-Indien. Acta Trop. 5: 135-159, 1948.

[2] Alicata, J. E.: A study of leptospirosis in Hawaii, Plantation Health (Aiea, Oahu, T. H.) 8: 6-32 (Oct.) 1944.
Alicata, J. E. and Breaks, V.: Incidence of leptospirosis among dogs in Honolulu as Determined by Serological Agglutination Tests, Jour. Wash. Acad. Sci. 32: 305 (Oct. 15) 1942; A survey of leptospirosis in Honolulu, HAWAII MEDICAL JOURNAL 2: 137 (Jan.-Feb.) 1943.

[3] Alicata, J. E.: Leptospiral Infection Among Rodents in Micronesia, Science 105: 236 (Feb. 28) 1947.

[4] New Zealand General Assembly. Nineteenth Report to the League of Nations on the Administration of the Mandated Territory of Western Samoa. Wellington, New Zealand, 1939. 37 pp. 1939. Twentieth Report to the League of Nations on the Administration of the Mandated Territory of Western Samoa. Wellington, New Zealand, 1940. 16 pp. 1940.

titis, and that some may represent cases of leptospirosis. Dr. K. F. Meyer, Director, Hooper Foundation, San Francisco, has informed me that he had observed the presence of leptospirae in kidney sections of 5 out of 24 rats and a positive agglutination reaction (with a titer of 1:30,000) against Leptospira canicola in 1 out of 12 sera of dogs submitted from Western Samoa. In addition he had observed no agglutination reaction with at least six different leptospiral strains in 6 convalescent sera of Samoans who had "catarrhal" jaundice. He expressed the opinion that Weil's disease rarely, if ever, causes death before the second week of illness and therefore the clinical picture of "malignant" jaundice in Samoa and the rapid course of the disease excluded leptospirosis. According to information supplied by Simmons, Whayne, Anderson and Horack,[5] of 253 rats caught at random in American Samoa in 1939 (fiscal year 1939-1940) none was found to show leptospirae. That report is based on rat kidneys submitted by Captain Paul W. Wilson (MC) USN, then Naval Medical Officer in Samoa, for examination (by the silver impregnation method) at the Naval Medical School then at Washington, D. C. With reference to the above record, Capt. Wilson has informed me that the above kidneys were recovered from rats which had been poisoned with thallium sulphate. Feed which was mixed with the poison was used in the evening to attract the rats, and the dead animals were collected on the following morning for the purpose of securing kidney specimens. There is a possibility, therefore, that the postmortem changes prior to the opening of the rodents might have caused dissolution of the leptospirae resulting in the negative laboratory finding.

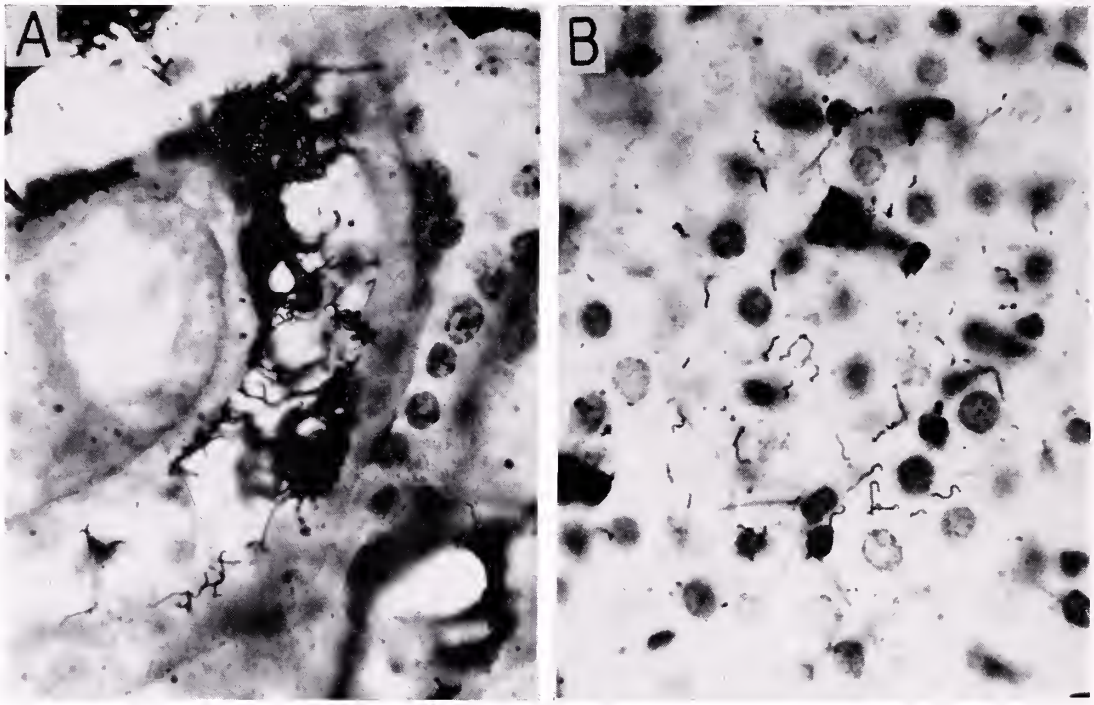


FIG. 2. (A) Section of kidney of rat trapped in Tutuila, American Samoa, showing masses of leptospirae in the convoluted tubules. (B) Section of guinea pig liver showing leptospirae. This guinea pig died of jaundice following exposure to kidney-emulsion of rats trapped in Tutuila.

In connection with this report it is desirable to mention that through the kindness of Dr. J. C. Lopdell I had the opportunity of securing 36 kidney specimens of individual rats trapped alive near Apia, Upolu, Western Samoa. Sections of these tissues, stained by the silver impregnation technique,[6] revealed 8, or 22.2 per cent, infected with leptospirae.

Materials and Methods

The rodents examined in this study were trapped alive in wire cages within various areas on the island of Tutuila. After each rat was killed by drowning, one of the kidneys was removed

[5] Simmons, J. T.; Whayne, T. F.; Anderson, G. W.; Horack, H. M., and Collaborators: Global Epidemiology: a Geography of Disease and Sanitation, v. 1, Lippincott, Philadelphia, 1944, p. 504.

[6] Meyer, K. F.; Stewart-Anderson, B., and Eddie, B.: Canine leptospirosis in the United States, Jour. Am. Vet. Med. Assoc. 95: 710 (Dec.) 1939.

and a portion of it was preserved in 10 per cent neutral formalin. Each of these tissues was later stained by the use of the silver impregnation technique. In several instances attempt was made to determine the presence of leptospirae in the kidneys by emulsifying fresh portions of the kidneys taken from about 10 rats and applying the emulsion to the shaved and scarified abdomen of a young guinea pig.

Microscopic leptospiral agglutination tests as described by Meyer, Stewart-Anderson and Eddie[6] were conducted on sera obtained from the following sources:

1. Thirty native Samoans hospitalized from various causes other than jaundice;
2. Ten persons (9 Samoan, 1 Caucasian) who were or had been hospitalized in the past few months for "catarrhal" jaundice;
3. One native Samoan who was suffering from "malignant" jaundice and had been ill for about 7 days, and
4. Five stray dogs from various parts of Tutuila.

In conducting all of the agglutination tests freshly formalinized antigen of each of the following 4 strains of leptospiral cultures was used: Leptospira icterohaemorrhagiae, L. canicola, L. australis (Ballico), and L. pomonae.

Laboratory and Clinical Observations

1. *Results of examination of rat-kidney sections.*

A total of 126 rats representing 4 different kinds were trapped on the island of Tutuila. The number of each kind was as follows: Rattus rattus norvegicus, 101; R. r. alexandrinus, 15; R. r. rattus, 4; and R. exulans, 2. This observation suggests that the norvegicus or "Norway" rat is the most common species of rat in Tutuila. The examination of sections from one kidney of each rat showed leptospirae in the urinary tubules (Fig. 2 A) in 24 (19.0 per cent) of all rats examined. All the rats found infected were of the norvegicus species. This finding is in accord with investigations conducted elsewhere which indicates that this variety is the one most often infected in nature. It is of interest to note that the incidence of rodent infection in Tutuila appears to be very similar to that found on the island of Upolu where, as has already been mentioned, of 36 rats examined, 22.2 per cent were infected.

2. *Results of attempts of guinea pig infection and the isolation of a strain of leptospirae.*

Five out of six guinea pigs exposed to fresh rat-kidney emulsion died of jaundice in from 10 to 12 days following exposure. The animals which died showed progressive emaciation for several days before death and jaundice appeared during the last one or two days. Darkfield examination of the liver of these animals as well as subsequent sectioning of this organ revealed a large number of leptospirae (Fig. 2 B).

From one of the guinea pigs which died of jaundice, a piece of liver was placed in Vervoort's medium[6] containing rabbit serum. As a result it was possible to isolate a strain of leptospira. When a portion of this culture was applied on the scarified skin of a guinea pig it produced jaundice and death of the animal after six days. Darkfield examination of the liver of this animal as well as subsequent sectioning of this tissue showed presence of leptospirae.

With the isolation of this strain it became desirable to ascertain how it compared immunologically with other known strains of leptospirae. At the suggestion of Dr. Karl F. Meyer, of the Hooper Foundation, San Francisco, a culture of this Samoan strain was turned over to Dr. Theodore K. Brunner of the same institution, through whose kindness immunologic reactions (serologic agglutination tests) were carried out. These tests involved the exposure of suspensions of various known strains of leptospirae to the serum of guinea pigs immunized against the Samoan strain. The results of these tests are shown below.

TABLE 1.—*Serologic Relationships of Samoan to Other Leptospiral Strains.*

Strain tested	ANTISERUM OF SAMOAN LEPTOSPIRA DILUTIONS AND REACTION (TITER) *1:50*	*1:100*	*1:300*	*1:1,000*
1. L. Andamana	0			
2. L. australis (Strain Ballico)	4	4	0	0
3. L. autumnalis Type A (Rachmat)	0			
4. L. ballum (M 27)	0			
5. L. bataviae (Swart van Tienen, P 502)	0			
6. L. Benjamini	0			
7. L. canicola (Hond HC P452)	0			
L. canicola (Utrecht IV)	0			
8. L. djasimani (236)	0			
9. L. grippotyphosa (Andaman CH 31)	0			
10. L. hebdomadis (P 519)	0			
11. L. icterohaemorrhagiae (Wijnberg, AB)	0			
L. icterohaemorrhagiae (Kantorowicz, A)	0			
12. L. Naami	0			
13. L. pomonae (L. australis C)	0			
14. L. salinem (P 5127)	0			
15. L. sarmini	0			
16. L. sejro (Mallersdorf 11)	0			
17. L. semaranga (R.S. 173 P 112)	0			
18. L. vleermuis (90 CP 210)	2	2		
19. Samoan leptospiral strain isolated	4	4	4	4

These tests indicate that the Samoan leptospiral strain shows a strong reaction to its own antiserum but that it is immunologically different from all of the 18 strains tested except L. australis (Ballico). In order further to separate the Australian from the Samoan strain, absorption tests using the Schüffner-Bohlander technique[7] were carried out by Dr. Brunner with antisera of the two strains. The results, which are listed below, show that L. australis (Ballico) absorbs all of the agglutinins against the Samoan leptospira, indicating that these two strains probably are very closely related. The reactions were as follows:

1) Titer of Samoan antiserum with Samoan strain, 1:300;
2) Titer of Samoan antiserum with Australian strain, 1:100;
3) Titer of Samoan antiserum after absorption with Australian strain:
   a) Reaction with Australian strain—Negative
   b) Reaction with Samoan strain—Negative

In further comparison between the two leptospirae, it is of interest to note that the Australian strain, like that from Samoa, is transmitted by rats and is deadly to guinea pigs.[8] L. australis (Ballico) has been recorded from Australia and is also probably found in Indonesia and Switzerland.[9] Human infection in Australia has

[7] Schüffner, W., and Bohlander, H.: Zur Technik des Absattigungs Versuchs, Zbl. f. Bakt. 144: 434 (Oct. 9) 1939.

[8] Cotter, T. J., and Sawers, W. O.: A Laboratory and Epidemiological Investigation of an Outbreak of Weil's Disease in Northern Queensland, Med. Jour. Austr. 21: 597 (Nov. 10) 1934.

[9] Van Thiel, P. H.: The Leptospiroses, Universitaire Pers Leiden, Leiden, 1948, p. 223.

been reported among cane cutters and sugar cane field workers. The clinical course in man is said to be violent and may produce jaundice and death.[9]

3. *Forms of jaundice in Samoa and results of leptospiral agglutination tests on the serum of patients hospitalized for jaundice.*

There appear to be in Samoa two forms of jaundice (hepatitis) occurring most commonly among children and young adults. One has been referred to as "catarrhal" jaundice and the other as "malignant" jaundice. The first is a mild form, and the symptoms attributed to it are moderate fever, muscular pains, general malaise, headache, nausea, pain at the right hypochondrium, and frequent enlargement of the liver. The conjunctivae are jaundiced and occasionally injected. The jaundice often persists for one or more weeks and then the patient recovers. The "malignant" type of jaundice is very severe and has a dramatic onset. Reports indicate that it frequently starts as a mild type, then in a short time the patient becomes extremely restless, delirious and unconscious. Bleeding from the mouth and other body apertures is common. In one or two days coma supervenes and death follows. One of the important laboratory findings is the presence of polymorphonuclear leucocytosis, a finding frequently observed in cases of leptospirosis.

Leptospiral agglutination tests conducted on the sera of ten persons who were or had been hospitalized in the past few months for "catarrhal" jaundice showed no agglutination reaction with the four strains of leptospirae used.

While I was working in Samoa, an opportunity was presented for making observations for possible leptospiral infection in a patient who had developed a severe form of "malignant" jaundice. Before entering the hospital this patient had been ill for about six days and had shown general malaise, headache, sore throat and yellowish conjunctivae. On the day of admission the patient cried frequently and was unable to answer questions. His temperature was 99 F. and his conjunctivae were inflamed and injected. The liver and spleen were not palpable. He vomited from time to time, eliminating coffee-ground-like material. On the second day of hospitalization the patient was very restless and unconscious, and bled from the ears, nose and mouth. His temperature was 100 F. and the white blood count 18,950 per cubic mm. (polymorphonuclears 70%, lymphocytes 26%, eosinophiles 2%, monocytes 2%). The patient soon became comatose and expired late on the second day. In order to determine possible leptospiral infection, various tests were conducted on the second day of the patient's hospitalization and soon after death:

(a) Examination of the serum for leptospiral agglutinins (4 strains of leptospirae, as already indicated, were used);
(b) Inoculation of a young guinea pig with 1 cc. of whole blood, and
(c) Inoculation of another guinea pig with 1 cc. of urine.

At autopsy, samples of the liver and kidney of the patient were recovered and examined for leptospirae as follows:

(a) by darkfield examination of the kidney and liver emulsions;
(b) by inoculating a young guinea pig with mixed liver-kidney emulsion;
(c) by fixing and silver-staining specimens of the kidney and liver.

All of these observations proved to be negative for leptospirae.

4. *Leptospiral agglutination tests on random sampling of the serum of man and dogs.*

Three out of 30 sera of native Samoans chosen at random and tested by the use of 4 strains of leptospirae, as already indicated, reacted positive only to L. australis (Ballico), in the dilutions shown below. All of the 30 persons were being hospitalized for various causes other than jaundice.

TABLE 2.—*Serologic Reactions of Sera From 3 Non-jaundiced Samoans to L. Australis (Ballico).*

	SERUM DILUTION AND REACTION (TITER)		
Positive reactor	*1:30*	*1:100*	*1:300*
1	3	2	0
2	4	3	0
3	3	2	0

These findings, though not conclusive, may possibly indicate the existence of infection of man in Samoa with leptospirae of the so-called Samoan strain, since antisera of this strain, as already indicated, partially agglutinate L. australis (Ballico).

Four out of 5 sera of dogs examined at random, using 4 strains of leptospirae, as already indicated, showed various agglutination reactions:

TABLE 3.—*Dog Serum Agglutinin Titers Against 4 Strains of Leptospirae.*

		SERUM DILUTION AND REACTION			
Dog No.	*Strains tested*	*1:30*	*1:100*	*1:300*	*1:1,000*
1	L. icterohaemorrhagiae	3	3	2	1
	L. canicola	4	3	2	1
	L. australis (Ballico)	3	2	0	0
	L. pomonae	4	4	2	0
2	L. icterohaemorrhagiae	4	3	2	1
	L. canicola	3	2	0	0
	L. australis (Ballico)	0	0	0	0
	L. pomonae	3	3	2	0
3	L. icterohaemorrhagiae	4	3	2	0
	L. canicola	3	2	0	0
	L. australis (Ballico)	4	3	1	0
	L. pomonae	4	3	1	0
4	L. icterohaemorrhagiae	3	1	0	0
	L. canicola	0	0	0	0
	L. australis (Ballico)	4	2	0	0
	L. pomonae	0	0	0	0

Although the actual proof of the occurrence of human and canine leptospirosis in Samoa will rest upon the isolation of the causative microorganisms, these positive agglutination reactions are highly suggestive of the occurrence of that disease in human and canine hosts, and of the presence of various strains of leptospirae in Samoa.

Summary and Discussion

The existence of murine leptospirosis in Tutuila, American Samoa, has been conclusively established by finding the leptospirae in tissues of rodents and by animal inoculation experiments. The results have indicated that 24 (19 per cent) of 126 rats examined were positive. Moreover, leptospirae were found in 8 (22 per cent) of 36 rats trapped on the island of Upolu, Western Samoa.

As a result of animal inoculation, it has been possible to demonstrate that the rodent leptospirae from Tutuila are virulent and able to produce jaundice and death in guinea pigs. Comparative immunological tests, using 18 different strains of leptospirae, indicate that the Samoan rodent strain is very closely related to Leptospira australis (Ballico), which is known to produce severe infection in man in Australia.

The above findings present a problem of peculiar public health interest. In Samoa, as in many other Pacific Islands, the rat population appears to be very abundant in many areas, including native villages. The open-type of "fale" (house) construction in Samoa undoubtedly simplifies the entrance of rodents within human dwellings, resulting in possible contamination. Human leptospiral infection is most likely acquired, among other means, as a result of contact with water or moist soil contaminated with infected rodent urine. In Samoa, rainfall is usually high, the mean annual precipitation being about 196 inches. The continuous presence of moisture on the ground, particularly during the rainy months extending from about December to March, appears to be conducive to infection among the native population, whose habit of going bare-footed is universal.

Up to the present time there have been no cases of human leptospirosis reported from Samoa. However, in this study weakly positive agglutination reactions against L. australis (Ballico) have been found in the serum of 3 out of 30 native Samoans examined at random. Similarly, various positive agglutination reactions have been noted among sera of stray dogs. Serologic tests, using 4 strains of leptospiral antigens, conducted among 10 persons who had experienced "catarrhal" jaundice, demonstrated the absence of specific agglutinins. Similar serologic tests, animal inoculations, and tissue studies, conducted with specimens from one patient who died of "malignant" jaundice, failed to demonstrate the presence of leptospiral infection.

Evidence from serologic tests conducted is strongly suggestive of the occurrence of human and canine leptospirosis in Samoa. There is a possibility that certain illnesses ascribed to "malignant" jaundice represent cases of leptospiral infections. Such a diagnosis can be established best by serologic agglutination tests employing especially strains which have been isolated locally and by the use of material such as blood, urine, liver, etc., of suspected cases for animal inoculation. In addition to these suggested investigations, further studies are desirable to ascertain the various strains of leptospirae which may exist among animals in Samoa and their possible medical importance.

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Racial Analysis of Ocular Defects in the Schools of Hawaii

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HILO HONOLULU

IN 1935 a Bureau of Sight Conservation and Work with the Blind was set up by the Hawaii Territorial Legislature. By 1938 a program was completed for vision testing and detection of other ocular defects in the schools throughout the Territory. All funds for this program are derived from the local government except for federal monies to aid in vocational rehabilitation of the blind. This Bureau is separate from the Department of Education and the Department of Health. The schools of the Territory are all controlled by the Department of Education, enabling a uniform system to be maintained throughout the counties and facilitating the work of the Bureau of Sight Conservation, since separate methods of financial support and administrative control for each county have not been necessary as is generally the case throughout the United States.

The work in the schools is carried out by trained personnel. All are university graduates who have had additional graduate training in sight conservation at the University of Hawaii or elsewhere. The testing of vision is carried out by the teachers in the schools under direct supervision of the Bureau worker. All defects are subsequently checked by her. In addition to this, she sees each individual student, carrying out an inspection of the eyes and the cover test for ocular balance. If there are absentees, she returns at a later date to examine them.

Those children found to have defects are referred for ophthalmologic examination. The majority go to ophthalmologists as they are encouraged to do so by the bureau. Reports from optometrists on refractive errors are accepted. An important function of this program is the follow-up to see that proper examination is carried out, assistance in obtaining glasses in cases where there are financial difficulties by enlisting the aid of charitable organizations or the Department of Public Welfare, and the placement of visually handicapped children in sight saving classes or in the school for the blind.

Forms have been provided in order that the findings of each ophthalmologic examination may be recorded and recommendations written by the ophthalmologist when special treatment or placement is indicated. The time of re-examination is also noted. The completion of these forms has been difficult to obtain in some instances, but in general the cooperation of physicians has been quite good. The findings regarding refractive errors are satisfactorily recorded. Those on other items, such as muscle balance and ocular diseases, necessarily depend on the thoroughness and qualifications of the examiner. Eighty percent of the examinations were carried out by physicians practicing ophthalmology, the remainder by optometrists. When these matters are taken into consideration, it is evident that the statistics presented in this report are relatively accurate regarding refractive errors while those concerning other conditions give a general picture as to the prevalence of the more important diseases.

TABLE 1.—*Statistics of Ocular Defects by Grade Divisions.*

	TOTAL ENROLLMENT	VISION TESTED	VISUAL DEFECTS		FOLLOW-UP COMPLETE	
			Number	*Percent*	*Number*	*Percent*
Kindergarten	5,476	5,077	70	1.28	59	84.29
Elementary	51,500	50,699	3,305	6.42	2,860	86.54
Intermediate	22,740	22,334	2,862	12.59	2,554	89.24
High	19,665	19,324	3,667	18.65	3,288	89.66
Special	996	512	62	6.22	58	93.55
GRAND TOTAL	100,377	97,946	9,966	9.93	8,819	88.49

At the time the activities of the department began there were 22 children in the school for the blind. At the present time there are 15. Sight Saving classes were set up in conjunction with the Department of Education in the various counties. They now have an enrollment of 43 students in five schools. The general requirement for admission is vision of 20/70 or less in the better eye. These classes are instructed by teachers who have had special training in this work.

In 1944 a statistical department was set up by the Bureau to record work carried out and the findings of examination. Table 1 is an analysis of the work of the department for the school year 1947-48. Noteworthy is the high percentage of

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TABLE 2.—*Percent of Ocular Defects by School Grades and Diagnosis, School Year 1947-1948*

SCHOOL GRADE	TOTAL ENROLLMENT	PERCENT OF TOTAL ENROLLMENT										
		01 NORMAL	02 MYOPIA	03 HYPEROPIA	04 MYOPIC ASTIGMATISM	05 MIXED ASTIGMATISM	06 HYPEROPIC ASTIGMATISM	07 COMP. MYOPIC ASTIGMATISM	08 COMP. HYPER. ASTIGMATISM	09 RX-4 & OVER	19 STRABISMUS	27 OTHERS
Kindergarten	5,588	0.29	0.11	0.16	0.05	0.07	0.14	0.07	0.07	0.04	0.07	0.29
Elementary	51,473	0.71	0.68	0.59	0.17	0.74	0.56	0.59	0.61	0.06	0.15	0.80
Intermediate	22,706	0.83	2.25	0.82	0.50	1.52	1.18	2.71	1.03	0.44	0.15	0.85
High	19,640	0.71	3.69	0.91	0.97	2.37	1.64	5.31	0.90	0.78	0.10	0.73
Special	970	0.31	0.93	0.52	0.41	1.13	0.93	3.61	0.82	0.21	0.41	2.06
Total	100,377	0.71	1.57	0.68	0.39	1.20	0.89	1.99	0.73	0.29	0.14	0.78

TABLE 3.—*Percent of Ocular Defects by Diagnosis and Race, School Year 1947-1948*

RACE	TOTAL ENROLLMENT	PERCENT OF TOTAL ENROLLMENT													
		01 NORMAL	02 COMP. MYOPIC ASTIGMATISM	03 MYOPIA	04 MYOPIC ASTIGMATISM	05 MIXED ASTIGMATISM	06 COMP. HYPER. ASTIGMATISM	07 HYPEROPIA	08 HYPEROPIC ASTIGMATISM	09 RX-4	19 STRABISMUS	27 OTHERS	28 NO FOLLOW-UP DIAG. UNDETERMINED	29 M.D.	30 OPTOMETRIST
Hawaiian	2,758	0.8	0.6	0.4	0.3	0.6	1.0	0.6	0.9	0.1	0.2	1.2	19	121	22
Part Hawaiian	20,375	0.5	0.7	0.6	0.2	0.6	0.5	0.6	0.6	0.1	0.1	0.6	186	810	163
Puerto Rican	1,764	0.9	0.7	1.1	0.4	1.2	1.4	1.0	1.1	0.0	0.2	0.8	31	133	18
Portuguese	6,562	1.0	1.5	1.1	0.5	1.5	2.0	1.8	1.5	0.2	0.2	1.2	128	653	110
Other Caucasian	5,546	0.7	1.9	1.0	0.4	1.3	0.9	1.3	0.9	0.2	0.1	0.4	198	420	61
Chinese	5,621	0.6	5.1	2.5	0.5	1.5	0.9	0.4	1.1	0.7	0.2	0.5	119	642	98
Japanese	41,684	0.8	2.8	2.4	0.5	1.6	0.6	0.5	1.0	0.4	0.2	0.9	297	3542	812
Korean	1,036	0.5	3.2	1.9	0.8	1.5	0.8	1.3	1.1	0.0	0.1	0.6	26	95	15
Filipino	9,732	1.0	1.2	1.3	0.4	1.1	0.7	0.8	0.8	0.2	0.2	1.0	105	612	153
All Others	5,299	0.5	0.5	0.6	0.1	0.5	0.3	0.4	0.4	0.1	0.0	0.4	35	163	25
Total	100,377	0.7	2.0	1.6	0.4	1.2	0.7	0.7	0.9	0.3	0.1	0.8	1144	7191	1477

children whose vision was tested and the degree of follow-up obtained. The steady rise in visual defects (particularly refractive errors) in the higher grades of school is well known by ophthalmologists and is strikingly illustrated here.

Table 2 is a study of ocular defects by diagnosis by grade divisions. The statistics were compiled on the basis of individual eyes. "Normal" under column 01 refers to the fellow eye in a case found to have a visual defect in the other eye. The myopic defects probably represent the majority of those conditions in the children in school as they are readily detected by determination of visual acuity. The hyperopic defects listed in the table represent only those detected because of poor vision or asthenopic symptoms and naturally comprise only a small portion of the eyes having hyperopia since in this age group this condition is to be considered normal in its minor degrees and usually does not give rise to symptoms. All refractive errors show an increase with age. The increase in myopia and compound myopic astigmatism is particularly striking. There is a very marked increase in the number of individuals wearing a correction in excess of minus four diopters as they progress through school. However, the percentage wearing a correction in excess of minus ten diopters is remarkably constant suggesting that most of the individuals with errors this great were born with myopic eyes. This is borne out by clinical experience. There is a very large amount of myopia which progresses up to minus seven or eight diopters and then becomes stabilized. Cases of malignant myopia are exceedingly rare.

The cases of choroiditis include acute and healed lesions. There is evidence of an increase with age as would be expected. Interstitial keratitis is remarkably uncommon. Many of the cases of optic atrophy are due to congenital lesions, others are secondary to local lesions in the retina. Retinitis pigmentosa is not uncommon in the older age groups of all races in Hawaii and it is not surprising that an occasional case is recognized in younger individuals. The smaller percentage of ptosis in older individuals indicates that surgical correction has been carried out.

From these statistics the incidence of strabismus is only 2.6 per thousand. This figure is probably far too low because of incomplete reports from

examiners. However, the incidence of accommodative strabismus in the population is known to be low from clinical experience.

Pterygium is a common and occasionally malignant disease in Hawaii. Statistics from other sources[1] indicate the incidence in the general population is as high as 15 per cent. That it can begin at an early age is indicated by the large number of cases reported in these children.

the percentages for the Spanish children as the number examined is probably not enough to be statistically significant. To some extent this is also true of the Korean and Puerto Rican groups.

It is immediately apparent that myopic errors are much more common in the Oriental races and the Chinese have considerably more than the Japanese and Koreans. This bears out the traditional concept—one has only to remember the cartoons

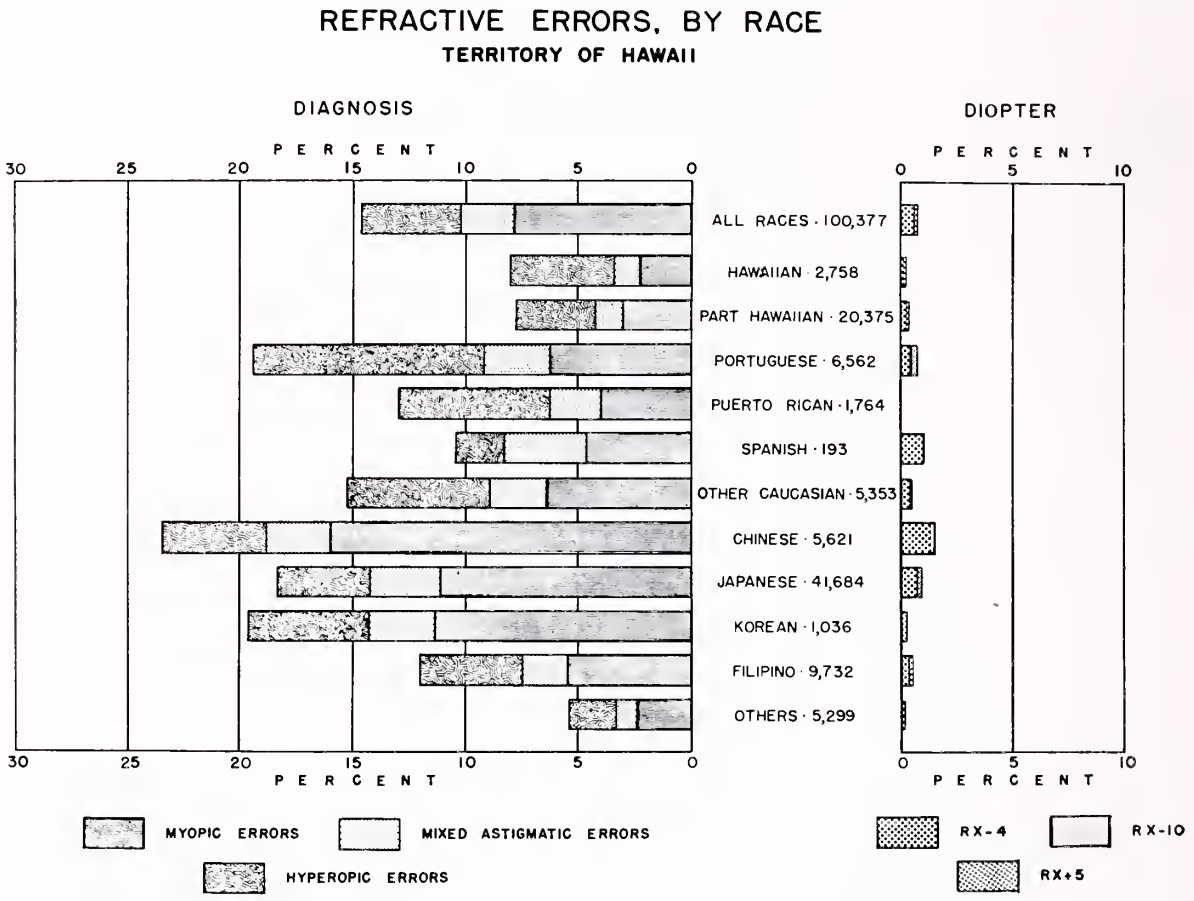


Table 3 is an analysis of defects by racial groups to determine whether there are any significant differences. Since the statistics on refractive errors are most accurate and comprehensive these have been reduced to percentages in Chart 1. It must be remembered that these represent eyes and that in many individuals both eyes have the same defect so the percentage on a case basis would be somewhat more than half of the figures given here.

For the purpose of condensation myopic, hyperopic, and mixed astigmatic errors are listed separately. Too much faith cannot be placed in

during the last war depicting Japanese soldiers with heavy lenses to realize the extent of this impression. It seems possible that this condition may be the result of the age of the Oriental civilization and culture since the more primitive races —Hawaiian, part-Hawaiian, and Filipino—have much smaller amounts, with the Caucasian groups in between. On the other hand, hyperopic errors are relatively less among the Orientals, particularly the Japanese, while the Portuguese have the highest incidence. In the higher myopic errors, with a defect of four diopters or more, the Chinese and Japanese have the highest percentage if one excludes the Spanish on account of the small number in that group. The errors of ten diopters show no predilection for any race. This again might be

[1] Larsen, I. J., and Crawford, H. E.: Review of First Annual Meeting of the Territorial Association of Plantation Physicians, Plantation Health 9:5 (Jan.) 1945.

Corboy, P. M.: An Eye, Ear, Nose and Throat Examination of Plantation Workers, Plantation Health 9:5 (July) 1945.

interpreted to indicate that high myopia as it occurs in the races of Hawaii is largely a congenital defect of the dioptric system rather than the result of progressive stretching of the globe.

The hyperopic errors of five diopters or more appear to be significantly more common in the Filipino race. The Portuguese and Koreans are next but much lower. It is questionable whether the figure for the Koreans means anything as the number of individuals is small and it is possible that there was only one case with both eyes involved. The Chinese and Japanese again have a low rate in this category.

The incidence of various diseases in the different races on a percentage basis does not indicate any significant statistical difference among the various races studied. There also does not appear to be any important difference in those who attended ophthalmologists or optometrists among these groups.

There is a significant difference in the column "Follow-up Incomplete" in that the Caucasians were apparently the least interested since their percentage is 3.7 while the Japanese with 0.7 per cent were most active in obtaining a diagnosis.

Summary

An analysis of the work of the Bureau of Sight Conservation and Work with the Blind in the Territory of Hawaii has been presented. The statistics compiled indicate an increase in refractive errors with age. There is a high incidence of myopia in the Oriental races, particularly the Chinese. Strabismus appears to be relatively uncommon. There is no significant racial difference in the percentage of ocular diseases. The degree of follow-up and correction of ocular defects appears quite high.

Potentialities in Congenital Syphilis With Case Presentations

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HONOLULU

Potentialities from a Neurotropic Strain of the Treponema Pallidum

ALTHOUGH there has not been universal agreement among syphilologists on the subject of a neurotropic strain of Treponema pallidum, it is thought worthy of consideration in this presentation. Moore[1] states that several individuals infected from a single source may develop neurosyphilis and that the incidence of congenital neurosyphilis is significantly higher among the syphilitic children of neurosyphilitic patients than in an unselected group of congenital syphilitics. Kemp and Poole[2] pointed this out as far back as 1925.

Case Presentations

This report concerns the *K* family, which is of Hawaiian-Caucasian ancestry. Three of the *K* children were referred to the Health Department clinic in 1938 because their mother had been admitted to the Territorial Hospital in 1931 where a diagnosis of cerebrospinal syphilis with mental disturbance was made. She expired there in 1941. We have no information as to whether the father had syphilis or not. However, we know that two sisters and two brothers of the mother had congenital syphilis. As to whether the mother of the *K* children had congenital syphilis we were not able to determine. However, our records show that the grandfather of these children (the mother's father) had syphilis and leprosy. Two of the sisters and one brother of the mother in this family developed central nervous system syphilis. The three children of the *K* family were Agatha, age 12, Ivan, age 10, and Ellen, age 8 (in 1938). After serologic studies and physical examinations, all three were daignosed as having congenital syphilis and were started on antisyphilitic treatment. Later, a fourth child, Shirley, age 6, who was born in the Territorial Hospital while her mother was confined there, was found also to have congenital syphilis. These children all took what was considered adequate treatment between 1938 and 1944. Amounts of treatment varied from 39 to 54 injections of a trivalent arsenical compound and 43 to 82 injections of a bismuth salt.

Spinal fluid examinations were negative on all children except Ellen, whose age was 10 when the spinal fluid examinations were done in 1940. Routine treatment with arsenic and bismuth was continued on this child and her spinal fluid became normal during the following year. It has continued to be normal since that time. It has been checked at intervals of between six months and one year. These children have all continued to have positive serologic tests for syphilis with titers varying from 32 to 128 Kahn units.

In February 1948 the records on these patients were reviewed and, because the mother and her two sisters, as well as her brother and daughter, Ellen, had shown evidence of central nervous system syphilis, it was recommended that they all be rechecked with physical examinations and spinal fluid examinations. Ellen and Ivan, who were then 18 and 20 years of age, respectively, were checked but it has not been possible to get rechecks on Agatha and Shirley as yet. Ellen showed no evidence of central nervous system syphilis on spinal and physical examinations, but Ivan was found to have Argyll Robertson pupils and sluggish deep reflexes. His mental condition was considered sluggish. His spinal fluid examination was strongly positive for syphilis in all tests with a cell count of 64. He was then given malaria therapy, consisting of 12 paroxysms of fever above 103 F., with 8,000,000 units of penicillin, in the Territorial Hospital. He responded well. His mental condition has improved and his spinal fluid is approaching a normal condition. His serologic test for syphilis is still positive with a titer of 32 Kahn units.

Comment

The *K* family demonstrates the potentialities from a neurotropic strain of the treponema pallidum. The mother in this family and two of her children developed proven central nervous system syphilis. Two of the brothers and one sister of the mother in the family also had proven central nervous system syphilis. From this family, the necessity for close spinal and physical follow-up with attention to the nervous system of all congenital syphilitic children born to neurosyphilitic patients is obvious.

Potentialities for Case Finding Through Congenital Syphilis Cases

Congenital syphilis cases often lead to the discovery and treatment with control of acquired syphilis cases. In support of this statement, I would like to present a case of congenital syphilis and show how this case pointed the way to the discovery of other syphilis cases and the discovery of another disease entity.

Case Reports

The *T* family (of Japanese ancestry) first came to the attention of the medical profession for the care of its syphilis when Nancy, a 12-year-old member of the family, was seen by an ear, nose, and throat specialist

* Chief, Bureau of Venereal Diseases and Cancer Control, Territorial Department of Health.

Presented at the regular monthly meeting of the Honolulu County Medical Society on June 3, 1949.

[1] Moore, J. E.: The Modern Treatment of Syphilis, ed. 2, C. C. Thomas, Baltimore, 1941, pp. 361-362.

[2] Kemp, J. E., and Poole, A. K.: Studies in Familial Neurosyphilis IV—The Incidence of Neurosyphilis Among the Parents of Congenitally Neurosyphilitic Children, J.A.M.A. 84: 395 (May 9) 1925.

in January 1946, because of a complaint involving the right eye. This doctor recognized the condition as an interstitial keratitis due to congenital syphilis and found her serologic test for syphilis positive. He then began to inquire about the family history of syphilis.

The mother, who was 41 years of age, gave no history of lesions suggestive of syphilis but when her serologic test for syphilis was taken, it was found to be positive. She could not recall having had a previous blood test for syphilis.

The father of the child was then examined and found also to have a positive serologic test for syphilis. He gave no history of lesions suggestive of syphilis but stated that he had gonorrhea in 1928 but no blood test was taken at that time for syphilis. His first serologic test for syphilis had been found positive in 1943. Following this blood test report, he took a small number of arm and hip injections.

There were three sons in the family. Two were older and one younger than Nancy. The eldest son, who was born in 1928, was found to have a negative serologic test for syphilis and no evidence of congenital syphilis was found on examination. The next son, born in 1930, was found to have a positive serologic test for syphilis and was definitely diagnosed as having congenital syphilis. The youngest son, born in 1935, was found to have a negative serologic test for syphilis and no evidence of congenital syphilis was found.

The four members of the family who were found infected with syphilis were started on antisyphilitic treatment by their private physician; but he later referred them to the Health Department clinic for continuing their treatment, since they could not afford further private medical care. They all faithfully continued their treatment and received what was considered adequate antisyphilitic therapy. The boy who was born in 1930 is now in the Army. His serologic test for syphilis was still positive when he went into Service, but he was accepted after a summary of his history, examination and antisyphilitic treatment was sent to the induction station medical officer. All members of the family are well at this time. Their spinal fluid examinations and physical examinations have not revealed evidence of late syphilis.

The wife and mother in this family was found to have moderate erosion of the uterine cervix on examination. She stated that she had noted a discharge after the birth of her last child in 1935 and she had been given local treatment to the cervix, but she had not had a pelvic examination since 1936 (a period of twelve years). Vaginal and cervical smears stained with the Papanicolaou stain contained cancer cells. A biopsy taken from the cervix showed early epidermoid carcinoma. She was given x-ray therapy in October, 1948. Since that time, the smears have been repeated once a month and the biopsy has been repeated on two occasions. Six months have now elapsed and the smears have become negative for cancer cells. The most recent biopsy was taken only about ten days ago. I have reported this family in order to illustrate the potentialities from finding a case of congenital syphilis in such a family as this one.

Serologic Survey Report

In order to show further how the finding of congenital syphilis cases may point to the discovery of acquired cases of syphilis, I would like to report, briefly, on a serologic survey in one of the high schools in Honolulu. During the past year, blood tests were taken on almost all seniors in one particular high school. A total of 896 blood tests were taken. Two previously known cases of syphilis were found but we also found three girls who had positive serologic tests for syphilis for the first time. They had not been suspected of having syphilis before the survey was conducted. Following the first positive blood tests for syphilis, they had repeated blood tests which were positive. They were then examined and diagnosed as having congenital syphilis. Their mothers were examined and all found to have previously unknown late latent syphilis. Siblings in the families represented by these three girls have not been found infected with syphilis.

Potentialities for Control and Elimination of Congenital Syphilis

As Stokes, Beerman, and Ingraham[3] have pointed out, "Most privately supported organizations and the general public are much more willing to expend effort and funds toward the control of the disease which is innocently acquired in marriage and transmitted to the helpless and defenseless offspring before birth (as in congenital syphilis) than they are to contribute to the control of the more sordid aspects of this problem which too often embrace the whole field of sex behavior, maladjustment at home, prostitution, and sexual promiscuity."

One of the first steps which should be taken by any community in an effort to control congenital syphilis would be the passing of a law controlling prenatal syphilis. Along with this there should be a law controlling premarital syphilis. Thirty-six states now have prenatal blood test laws and 38 states have premarital laws. In Hawaii, the prenatal law was passed in 1943.[4] The premarital law was passed two years later in 1945.[5] The general practitioner, the obstetrician, and the pediatrician have all been placed by these laws in positions of great responsibility, which they have carried well, and as a result, definite progress has been made in the control of syphilis in marriage, in pregnancy and in early infancy. It is believed by most public health workers that we have an unparalleled opportunity in the control of congenital syphilis. This feeling is based on the fact that the whole problem of congenital syphilis can be largely solved by a few days or, at longest, a few weeks of treatment under competent medical

[3] Stokes, J. H.; Beerman, H., and Ingraham, N. R., Jr.: Modern Clinical Syphilology, ed. 3, Saunders, Philadelphia, 1944, p. 1,068.
[4] Act 219 (H.B. No. 316) Session Laws of Hawaii, 1943.
[5] Act 136 (H.B. No. 511) Revised Laws of Hawaii, 1945.

supervision during the first few months of pregnancy, with an adequate follow-up of the newborn infant. The advent of penicillin therapy in the treatment of syphilis and the prevention of congenital syphilis have made the future control of this disease seem more probable.

Management of Pregnant Syphilitic Women

In order to prevent congenital syphilis if possible, it is recommended that all pregnant syphilitic women with positive or negative blood tests receive antisyphilitic treatment as early in pregnancy as possible unless the attending physician makes a definite recommendation that such treatment is not necessary. Occasionally, treatment will not be indicated because of the long duration of the disease, the diagnosis of congenital syphilis, or a history of extensive antisyphilitic treatment followed by the delivery of non-syphilitic children. According to present thinking on this subject, the treatment of syphilis in pregnancy should consist of at least 6,000,000 units of penicillin, which may be given over a ten-day period. Six hundred thousand units of a type of penicillin which will produce a prolonged blood level should be given every day for ten days.

Management of Infants Born to Syphilitic Women

A serologic test for syphilis on the cord blood at the time of delivery does not indicate the presence or absence of syphilis of the child, and it may be misleading. Whenever there is a history of present or past syphilis in the mother, regardless of the results of any blood test taken prior to or at the time of the delivery, the newborn infant should be carefully supervised from birth until he can be declared free from syphilis. It is important to diagnose and treat infected infants as soon as the disease can be definitely diagnosed. It is also important to avoid instituting antisyphilitic treatment on a child who is not infected.

If infants are found to have definite clinical syphilis, such as manifested by skin lesions, snuffles, or bone changes, the diagnosis of syphilis must be confirmed by darkfield examinations or at least two positive blood tests before treatment is instituted. Treatment should be started immediately after confirming the diagnosis in order that the prognosis may be as good as possible. It is recommended that children under five years of age be given at least 100,000 units of penicillin per pound of body weight, the total dosage being spread over a period of at least fifteen days. Children over five years of age should usually receive 6,000,000 units of penicillin.

An infant without clinical evidence of syphilis but born to a syphilitic mother should have a quantitative serologic test for syphilis at approximately two months of age. If the test at two months is negative, the infant is likely to be non-syphilitic, but at least one subsequent blood test should be performed, preferably at about six months of age. If this test at six months is also negative, it is very unlikely that syphilis will develop at a later date.

If the quantitative test for syphilis at two months of age is positive, it should be repeated at least once every two weeks in order to see whether the titer is increasing or decreasing. If the titer is increasing, then the child probably has syphilis. If it is decreasing, he probably does not have syphilis. It will usually be possible to make a definite decision on the syphilitic status of the infant by the time he is three months of age.

What Have We Accomplished in the Control of Congenital Syphilis?

On the national level, it can be shown that in the United States infant mortality from congenital syphilis decreased markedly in the ten-year period between 1937 and 1947.[6]

In California, the prenatal blood test law was passed in 1939. A study was made of deaths due to syphilis in infants between the period from 1938 to 1945.[7] It was shown that the number of infant deaths due to syphilis in California decreased from 51 in 1938 to 28 in 1945. With the increase in number of births, the corresponding infant mortality rate for syphilis (per 1,000 live births) decreased from .50 in 1938 to .15 in 1945. A study was also made of the number of congenital syphilis cases reported to the State Health Department for the years 1938 to 1945. There were 163 congenital syphilis cases reported in 1938 while the figure for 1945 was 100. The lowest number of cases was reported in 1942 and in 1943. There were 74 cases each year. The case rate in this group dropped from 1.60 in 1938 to .54 in 1945. The rates here are on the basis of cases per 1,000 live births.

In Hawaii, it is difficult to show as much progress as has been made in California since the number of deaths attributed to congenital syphilis is much smaller than in California. We have made a study of the deaths attributed to congenital syphilis for the past 15 years—that is, between 1933 and 1948. In 1933 the rate per 1,000 live births was .80. This went up and down and in 1942, the year before the prenatal blood test law

[6] Social Legislation Information Service 11:61 (Mar. 14) 1949.

[7] Brewer, A. F., and Olson, F. E.: Evaluation of California's Prenatal Law Requiring a Serologic Test for Syphilis, Am. J. Syph. Gon. and Ven. Dis. 31:633 (Nov.) 1947.

was passed, the rate was .30 per 1,000 live births. This has been reduced by small amounts each year until, for the year 1948, there was only one infant death reported as due to congenital syphilis. This made the rate .07 per 1,000 live births. This figure compares very favorably with the mortality rates from syphilis in infants as reported for the Continental United States for the year 1947 which was .14 per 1,000 live births.[8] This is the most recent year available to me.

We have also made a study of the morbidity of congenital syphilis in Hawaii for the past five years—1943 to 1948. In Table 1 a comparison has been made between the rates in the Continental United States and those in Hawaii. It is not fair to make direct comparisons since the number of cases involved here would be much smaller than in the Continental United States. However, it does give us some idea of how we will compare with the United States as a whole. In the year 1943, there were 68 cases of congenital syphilis reported in Hawaii. This made a rate per 100,000 population of 14.1 as compared with the rate for the Continental United States of 12.6 for that year, based on 16,173 cases reported. Other interesting comparisons are found in the year 1944, in which the rate for the Continental United States was 10.7 as compared with 13.7 in Hawaii. In the year 1945 the United States had a rate of 9.7 and Hawaii had a rate of 7.4 per 100,000 population. In 1946, Hawaii was slightly higher than the United States and in 1947 the difference was considerable. The rate for 1947 was 8.7 per 100,000 population in the Continental United States as compared with 12.8 in Hawaii. In that year, there were 67 cases of congenital syphilis reported to the Health Department here. In 1948 the Continental United States had a rate of 9.4 per 100,000 population based on 13,309 congenital syphilis cases reported; in Hawaii, the rate was 9.1, based on 48 cases reported.

As reported earlier, it will be noted that, in general, Hawaii has a lower infant mortality rate than the Continental United States from congenital syphilis but has a higher general morbidity rate. This may mean that we are treating congenital syphilis cases better here than they are being treated in the Continental United States and, thus, babies do not die of the disease in so high percentage here as in the United States proper. Reporting of syphilis is considered better here than in most parts of the United States. This, too, would tend to make the morbidity rate higher than the rate for the United States.

[8] Statistical Letter; Div. of Ven. Dis., FSA-PHS—22:10 (May) 1949.

TABLE 1.—*Comparative Trend of Congenital Syphilis Morbidity Continental U. S. Civilians and Territory of Hawaii. Rates per 100,000 Population Fiscal Years 1943-1948.*

FISCAL YEAR		POPULATION	CONGENITAL SYPHILIS *Cases*	*Rates*
1943	Continental U.S.	128,728,000*	16,173†	12.6
	Terr. of Hawaii	483,363	68	14.1
1944	Continental U.S.	127,028,000	13,576	10.7
	Terr. of Hawaii	487,870	67	13.7
1945	Continental U.S.	127,037,000	12,339	9.7
	Terr. of Hawaii	502,122	37	7.4
1946	Continental U.S.	133,543,000	12,106	9.1
	Terr. of Hawaii	519,503	51	9.8
1947	Continental U.S.	140,974,000	12,284	8.7
	Terr. of Hawaii	522,490	67	12.8
1948	Continental U.S.	(1947 est.)	13,309	9.4
	Terr. of Hawaii	528,467	48	9.1

* U. S. population taken from Bureau of the Census, P-46, No. 6.

† Continental U. S. syphilis data taken partly from Journal of Venereal Disease Information, November 1947, p. 263, and partly from the Journal of Venereal Disease Information, January 1949, p. 32-33.

Summary and Conclusions

The potentialities from a neurotropic strain of Treponema pallidum are considerable. This should be kept in mind in the care of families in which there are neurosyphilitic members. The incidence of congenital neurosyphilis is considerably higher among children born to neurosyphilitic parents than in an unselected group of congenital syphilitics.

Congenital syphilis cases often point the way to acquired syphilis cases and lead to the discovery of other disease entities.

Definite progress has been made in the control of congenital syphilis. It should be possible to virtually eliminate this disease through the employment of proper regulations, careful examinations, and modern therapeutic methods.

Clinical Psychology in Hawaii

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FIVE recent developments—two nationally and three locally—have a significant bearing on the status of clinical psychology as a profession in the Territory of Hawaii. Hawaii seems to have been somewhat in advance of the rest of the country in its provision of services in clinical psychology, and in legislation affecting clinical psychologists. In view of this and in view of the many recent and impending changes in the practice of psychology, a report on the current situation may be of general interest. The country-wide developments have been the re-organization of the American Psychological Association in 1945, and the establishment of the American Board of Examiners in Professional Psychology in 1947. Locally, there have been two statutes, one passed by the 1943 Legislature, and one in 1947, dealing with certification of psychologists; and in January 1949, the formation of the Hawaii Psychological Association, with the expectation of affiliating as soon as possible as a constituent part of the American Psychological Association.

Although, as noted below, there are other specialties which would also be classified as professional psychology, the following statements refer only to the practice of clinical psychology. Perhaps a very brief historical statement would be in order. The first psychological clinic in the world, and the first use of the term, dates from about 40 years ago at the University of Pennsylvania. Since that time, the terms *clinical psychology* and *clinical psychologist* have referred to a practice, and to practitioners, both widely diverse in nature. At some times and at some places clinical psychology has been an ill-defined part-time activity of experimental psychology; elsewhere, a set of techniques exercised purely under medical supervision; elsewhere, an ethically dubious set of practices not far removed from phrenology or astrology; elsewhere, it has at least approached becoming a reputable professional specialty. The trend, fortunately, has been toward the last-named status.

In our modern American culture it seems to me that the following are all essential if we are to have a profession in a strictly defined sense.

1. A reasonably standardized program of formal education and supervised experience, such that the practitioners will meet certain standards of competence, however much they may differ in professional skill.
2. A code of ethics dealing, among other things, with the personal and professional responsibility of the practitioner to the client.
3. Legal provisions protecting the general public, and the profession, against practitioners who do not in both of the above respects meet the standards of the profession.
4. A self-governing and self-disciplining professional organization, which makes itself regularly and actively responsible for maintaining professional standards both as to training and as to practice.

Measured by such criteria, clinical psychology has only recently, and in only a few places, even approached professional status. I believe that the developments reported below will be of considerable interest, in indicating the manner and the extent of that approach, nationally, and more specifically within the Territory of Hawaii.

National Developments

The American Psychological Association, prior to its 1945 re-organization, was a scientific rather than strictly a professional society. Under the present organization, it is in part a professional society. Membership is of two classes, Fellow and Associate. For membership as a Fellow of the A.P.A. the requirements are: (1) a doctor's degree based in part upon a psychological dissertation, (2) prior membership as an Associate, and (3) either acceptable published research of a psychological character beyond the doctoral degree, or four years of acceptable professional experience subsequent to the granting of the doctoral degree. For membership as an Associate in the A.P.A. the applicant must: (1) have a doctor's degree based in part on a psychological dissertation, or (2) have completed at least two years of graduate work in psychology, or one year of graduate study plus a year of experience in professional work that is psychological in nature, and must, at the time of application, be devoting full-time to professional or graduate work that is primarily psychological in nature; or (3) be a scientist, educator, or other distinguished person whom the Board of Directors may recommend for sufficient reasons. According

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to interests, members may join one or more of the approximately twenty divisions into which the Association is divided. These divisions, may if they please, set up more exacting standards for membership than are required for membership in the Association at large. The largest single division of the Association, and one which has been active in establishing professional standards for divisional membership, is the Division of Clinical and Abnormal Psychology.

For membership at each level in the Division of Clinical and Abnormal Psychology the requirements are the same, except that a Fellow in Clinical Psychology must have had four years of successful full-time clinical practice; a Fellow in Abnormal Psychology, "either acceptable published research in abnormal psychology beyond the doctoral degree, or four years of acceptable professional experience in abnormal psychology subsequent to the granting of the doctoral degree"; and for qualification as Associate "satisfactory evidence of not less than two years of successful full-time clinical experience . . . or satisfactory evidence of two years' experience in professional work that is psychological in character in the field of abnormal psychology." Revisions in the above sets of standards will no doubt be made from time to time on the basis of accumulated experience.

Since the Association was only recently reorganized on the present basis, there are still some competent clinical psychologists who have not yet qualified as Fellows or Associates of the Division of Clinical and Abnormal Psychology. On the other hand, it is possible for a person who is not a psychologist to qualify as an Associate in the A.P.A. and as an Associate in the Division of Clinical and Abnormal Psychology.

The American Board of Examiners in Professional Psychology, established by the A.P.A., is a non-profit corporation which began operation in 1947 and announced the awards of its first 234 diplomas in March 1948. The Board issues three types of diploma: clinical, industrial, and counselling and guidance. Approximately three-quarters of the first group of diplomas were in clinical, the rest about equally divided between the other two types.

The By-Laws of the Board indicate the following minimal qualifications:

Satisfactory moral and ethical standing in the profession.

Membership in the American Psychological Association.

A doctoral degree in psychology, "or an equivalent degree as determined by the Board."

Not less than five years' experience acceptable to the Board in the specialty in which the candidate seeks the certification.

Candidates are to be given written and oral examinations, both theoretical and practical. Exceptions are allowed in the cases of older psychologists. For example, psychologists with their Ph.D., and with not less than five years of pertinent professional experience, need not take the examination if the Bachelor's degree was awarded before December 31, 1935; and psychologists without the Ph.D. degree but with not less than ten years of pertinent professional experience may also be granted the diploma without the examination, if the Bachelor's degree was awarded in 1935 or earlier. No examinations have yet been held, all of the diplomas thus far issued having been issued under one or the other of the above grandfather clauses.

Coincident with the above national developments there has been a good deal of activity in various locations looking toward certification of psychologists, licensing of psychologists, and formation of state psychological associations affiliated with the A.P.A. and interested in establishing and maintaining professional standards.

Recruitment and Training

With an inadequate supply of clinical psychologists to meet the large war-time and post-war demand, the Veterans' Administration and the U. S. Public Health Service have been giving liberal grants to approved universities and to students in training. There have been extensive and rapid changes in the graduate training of clinical psychologists prompted in part by a desire on the part of the universities to qualify for these Federal grants. The changes have been in the direction of more thorough and more uniform training. Briefly, the standard training program for clinical psychologists is being established as a four year graduate course: two years of class work, one year of internship, and a fourth year of class work, leading to a Ph.D. degree.

The Local Situation

A.P.A. Membership

This is relatively large, when considered in relation to the population. There are 17 Fellows or Associates of the American Psychological Association listed in the most recent directory as in Hawaii. This compares with a total of six for the state of Wyoming, 15 for Utah, ten for South Carolina, one in Nevada, and 14 in Mississippi—some of which have populations far in excess of ours. This should not be taken to imply that psychologists are unduly concentrated in Hawaii (there are 29 members in the city of Ithaca, New York). There are some other members who have

come to Hawaii since this year book was prepared, some former members thoroughly qualified who have let their memberships lapse, and some qualified applicants whose memberships are pending. We know of eight individuals in these categories; there may be others.

Division of Clinical and Abnormal

Of the above members of the A.P.A., one is a Fellow, three are Associates in the Division of Clinical and Abnormal Psychology; of the three Associates, two are psychologists, the third a psychiatrist. Of the 20-odd members of the A.P.A. now in the Territory, there are several others who although not now members of the Division of Clinical and Abnormal will readily qualify for such membership as soon as they wish to do so.

American Board of Examiners

At least three diplomas have been awarded to Hawaii residents by the American Board, two in clinical and one in industrial psychology.

Legal Status

Hawaii seems to have been well in the lead in giving clinical psychology legal recognition. Section 4066, Revised Laws of Hawaii, 1945, in setting forth commitment procedure for feeble-minded persons directs that the "application shall be accompanied by a signed certificate of a psychiatrist or other physician duly qualified by special professional training and experience in the diagnosis of feeble-mindedness, or of a psychologist in the psychological clinic of the Territory, or of a psychologist certified by said psychological clinic to be qualified in the diagnosis of feeble-mindedness . . ."

The above section, based on a 1943 statute, provides—so far as I know—one of the first certification laws for psychologists in the country. It is, of course, certification for a very limited function. But within these limits it is clear-cut and definite. It is closely tied in with our legal definition of feeble-mindedness, which defines as feeble-minded "Those who are incapable of self-support and self-management in the community, and who cannot attain to such self-support and self-management, by reason of deficient mental development as demonstrated by standard psychological tests, and who require supervision, control and care for their own welfare, or the welfare of others, or for the welfare of the community." (R.L.H. 1945 Section 4064.) In many states, where in practice the establishment of feeble-mindedness is based on psychological examination, the psychologist functions purely as a technician, with the professional responsibility lying with a physician.

A second, more recent piece of legislation affecting psychologists is Act 56, S.L.H., 1947, which provides in part for the amendment of Section 12324 Revised Laws of Hawaii 1945, dealing with juvenile delinquency, to provide "that the judge, if he shall determine that the best interests of the child so require, may cause any dependent child under twelve years of age who might otherwise be adjudged a delinquent child, as that term is defined in this chapter, to be examined by a psychiatrist or other physician duly qualified by special professional training and experience in the practice of child psychiatry, or a psychologist in the psychological clinic of the Territory, or a psychologist certified by said psychological clinic to be qualified in the practice of child psychology, and, if the written report of the results of such examination shall so recommend, may adjudge such child to be a delinquent child, notwithstanding the age of such child, and may thereafter deal with such child as a delinquent child under the provisions of this chapter."

This provision, like the one previously mentioned, certifies psychologists only with respect to a very limited function. But although the certification is for a very limited function, it is phrased in much more general terms than provided in the 1943 statute. Under Section 4066, the psychologist is certified merely as "qualified in the diagnosis of feeble-mindedness," but under the 1947 statute the certification is as being "qualified in the practice of child psychology."

No psychologists have yet applied for certification under either of the above. Certificate No. 1 was recently issued, without application, to Dr. Stanley D. Porteus, recently retired as Director of the Psychological Clinic. Probably certificates will be issued on request to diplomates in clinical psychology of the American Board of Examiners, provided that they have had a reasonable amount of local experience.

I am not sure how a judge or other person with legal training would interpret these two statutes. As a psychologist, I interpret them to mean that for the purposes specified—namely, diagnosis of feeble-mindedness, and determination whether the best interest of a child under the age of twelve will be served by adjudging him delinquent—psychiatrists and psychologists are regarded as equally qualified professionally. But this does not mean that the psychologist is engaged in the practice of medicine, nor that the psychiatrist is a clinical psychologist. Speaking as a clinical psychologist, I should not regard any clinical psychologist as qualified—certifiable—under either of the above

provisions, unless I had good evidence that he was aware of the boundary lines between medicine and psychology, and good evidence that he was always sensitive to the need for and diligent in procuring medical opinion in any case where it was indicated.

How have psychologists actually been operating under the above statutes? First, I would point out that the psychologist in the Bureau of Mental Hygiene of the Board of Health, who works under psychiatric supervision, is on the University payroll, assigned on loan to the Board of Health by the Psychological Clinic, and seems thus within the meaning of either statute to be qualified by definition, whether or not otherwise certified. This arrangement, for employment by the University but assignment on loan to the Board of Health, was made in 1945. I believe that one important reason for it was the fact that as of 1945 Hawaii was in advance of the rest of the country in legal provision for services in clinical psychology. The 1943 statute dealing with the commitment of feeble-minded persons gave the University Clinic a certification responsibility which it could not then accept or execute nearly as effectively as it can at the present time. The two national developments mentioned in the first section of this paper have made the problem of certification much simpler than it could possibly have been in 1945. They go far to protect applicants for certification from being judged by arbitrary or variable standards.

Very much the same comments might be made with respect to the one psychologist now working at the Territorial Hospital, also under psychiatric supervision, but part-time on the Psychological Clinic staff at the University.

Second, with respect to operations within the Psychological Clinic at the University, it seems proper to point out that the Clinic has in the past had, and now has, staff members whom we should be unwilling to certify under either of the above provisions. In brief, our psychologists may testify as to feeble-mindedness, or as to the desirability of declaring a young child a delinquent, but unless specifically certified, they may do so only as members of the Clinic staff. Under the previous, and under the present administration of the Clinic, certain staff members never sign certificates of feeble-mindedness without review, usually in staff meeting; and all staff members are instructed to present in staff meeting the case of any child under twelve of whom a judge inquires whether he ought to be declared a delinquent.

I know of only three such juveniles who have been referred for psychological examination during the 18 months that the law in question has been in force.

But since cases of alleged feeble-mindedness are frequent, a fuller statement of current practice seems desirable. I believe that virtually all commitments to Waimano Home because of feeble-mindedness are in fact made on receipt of a certificate signed by a psychologist in the Psychological Clinic at the University. There are, however, some exceptions. We have no way of knowing how frequently pediatricians, psychiatrists, or other physicians sign such certificates without referring to the Psychological Clinic for psychological examination. We do know of a certain number of cases about whom the Psychological Clinic has refused to testify on grounds that the more appropriate witness would be perhaps a neurologist, perhaps a pediatrician; there are other cases in which the Clinic has refused to testify without having psychiatric examination arranged in addition to the psychological examination. It might also be of interest to report occasional instances in which the psychologist has felt that a pediatrician or a neurologist was the appropriate witness but in which the physician has urged that the certificate of a psychologist be used.

Hawaii Psychological Association

Another local development, which is so recent that I mention it only with the briefest comment, is the formation in January 1949 of the Hawaii Psychological Association, whose purpose is "To advance psychology as a science, as a profession, and as a means of promoting human welfare." The intention is to affiliate as soon as possible with the American Psychological Association. Organized without the divisional structure characteristic of the A.P.A., its membership includes not only clinical psychologists, but industrial psychologists, experimental psychologists, educational psychologists, or other types of psychologist, scientific or professional or both.

Licensing

Licensing of clinical psychologists seems thus far to have been accomplished only in a few states, the first of which were Connecticut and Virginia. In Hawaii any person, regardless of the amount or nature of his training, and regardless of ethics, may safely put himself forward as a clinical psychologist, child psychologist, psychological consultant, or under any other such label. In Hawaii, furthermore, there seems not yet to be any provision classifying what a client says to a psychologist as a privileged communication. Legislation on these two points is needed if clinical psychology is to attain professional status in Hawaii.

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[EDITORIALS]

MEDICAL ANTITRUST SUITS

Twenty-two state, county and city medical societies, as of October 14, were being investigated by agents of the Antitrust Division of the Department of Justice in connection with alleged antitrust activities along the line of doctor-sponsored medical insurance plans. Attorney General J. Howard McGrath says it has been alleged that doctors are trying to monopolize prepaid medical care insurance plans.

This statement would be merely silly, in view of the proselyting for *all* sorts of voluntary prepayment plans in which medical organizations have been engaging for the past few years—were it not for the fact that the accusation comes from a political henchman of Mr. Truman's. This is not the pot calling the kettle black—far from it. It is the cookstove calling the tablecloth black. And it isn't silly,—not merely silly, that is—it's vicious. It's disturbingly suggestive of the police state technique of "the big lie"—the groundless accusation that serves as a springboard for all sorts of otherwise unjustifiable attacks.

Perhaps some encouragement may be borrowed from the government's feeling, as it seems to feel, that it would be bad to have medical prepayment plans monopolized. This view we most heartily endorse. Free competition among such plans cannot but be beneficial. And we trust that when and if any really serious threat of the monopolization of such plans *by the government* rears its ugly head, Mr. McGrath will be quick to see it and to take appropriate steps to prevent it.

HOSPITAL COSTS IN HAWAII

The Hospital Costs Study Committee of the Public Health Committee of the Chamber of Commerce of Honolulu has just published a 76-page report analyzing its findings. The subject is a complex one, and to completely understand it one would have to be a combination of hospital administrator, statistician, physician, and mathematician. Some of the charts, however, make sense even to a physician, and are worth some comment, if only to attract attention to this valuable and informative piece of work.

The proportion of hospital costs borne by patients at The Queen's Hospital, for example, has increased from 10 per cent in 1860 to 90 per cent in 1949; it jumped from 24 to 63 per cent in 1910. It has changed very little since 1920.

The other side of this picture—the extent of Territorial subsidization of hospitals—is shown in a graph; it has increased from $15,000 (to Shingle Memorial Hospital only) in 1939, to $550,000, divided among 10 hospitals, in 1949. Well over half this amount goes to the three largest hospitals.

Another graph shows that during this latter period, while the Consumers' Price Index has roughly doubled, hospital costs per admission have approximately tripled, and are still rising.

The Committee recommends, among other things, that all phases of nursing education should be financed by the Territory; that governmental agencies should pay full reimbursable costs for hospital services to government patients; and that a subsidy, related to the operating costs and other factors, should be granted by the Territory to non-

profit voluntary hospitals complying with certain stipulations regarding accounting methods and the like. The Chamber is to be congratulated on the publication of this creditable and useful study.

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YOUR LIBRARY NEEDS YOUR SUPPORT

The costs of operating your County Medical Society Library are met—just barely met—by an annual allotment from the funds of the County Medical Society. They are not adequate for all the Library's needs.

Binding of medical journals is one of the operations which is inadequately covered by this allotment. It is partially financed in this way, but at such a slow rate that it will be many years before it can be brought up to date. During this time many of our journals are exposed to risk of damage or loss, for they must be loaned unbound if the Library is to serve the doctors.

There are by now many doctors in the Territory who have not made a substantial contribution to the Endowment Fund of the Library. It is to these doctors in particular that an appeal is directed for a contribution to help advance the binding program at a more rapid rate. This is an investment in an important local medical institution, an institution of which we may well be very proud. See if you can't find fifty or a hundred dollars that you can spare to help in this worthwhile cause.

AMA CLINICAL SESSION

The Third Annual Clinical Session of the American Medical Association will be held in Washington, D. C., December 6 to 9, 1949. The program is especially prepared to meet the needs and interests of the General Practitioner. It includes scientific lectures and clinical sessions by outstanding authorities. Actual surgical procedures originating in Johns Hopkins hospital will be shown by color television, which was of such intense interest in Atlantic City during the annual meeting last June.

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Buy Christmas Seals



Help Stamp Out TB

MEDICAL NEWS

"Canker sores" (herpetic, or aphthous, stomatitis) have always been a painful, pesky problem. Aureomycin as a mouthwash, in 0.5 per cent aqueous solution (a standard 250 mg. capsule dissolved in 50 cc. of water), relieves the pain within a day and healing is well advanced within two days (Distelheim, I. H., and Sulzberger, M. B., *J. Invest. Derm.* 13:115 [Sept.] 1949).

* * *

Ménière's disease, always a difficult therapeutic problem, apparently yields to histamine desensitization (*Brit. Med. J.*, 2:216 [July 23] 1949). In line with this, a physician, afflicted with Ménière's disease, reports (Letter to the Editor, *New England J. Med.*, 240: 1063 [June 30] 1949) almost complete relief of his vertigo, tinnitus and hearing loss, following the use of Dramamine, the new antihistaminic. He also mentions three other patients who received similar striking benefit from the drug. Dramamine is now under investigation in a group of 30 patients with Ménière's disease at the Johns Hopkins Hospital.

* * *

Gantrosan, a new highly soluble sulfonamide, produced by Hoffman La Roche, is reported to be safer than the standard sulfas because of the much lower incidence of crystalluria and other toxic effects (Brickhouse, R. L., et al: *Am. J. Med. Sci.* 218:133 [August] 1949). The authors admit that meningococcic meningitis and Shigella dysentery are just about the only major diseases in which sulfonamides are still the therapeutic agents of choice, and they further state that Gantrosan is not any more effective than the older sulfas, but they emphasize that its much lower nephrotoxicity is a decided advantage.

* * *

The effect of heparin and dicumarol in preventing postoperative adhesions is reported by Davidson and Park (*Arch. Surg.* 59:300 [August] 1949). The two substances were studied alone and in combination, and it was found that heparin in gelatin, given subcutaneously, was much more effective than dicumarol in preventing adhesions, and was more controllable in its effects than dicumarol. Heparin in gelatin reduced the incidence of adhesions to 12 per cent as compared to 100 per cent in the control animals.

* * *

Hetrazan is a new compound which has been found to be very effective in filariasis and onchocerciasis (Hawking, S. and Laurie, W.: *Lancet*, 2:146 [July 23] 1949). Further tests showed it to be unusually effective against loiasis (Murgatroyd, S. and Woodruff, A. W.: Ibid. p. 147). To anyone planning on spending a weekend in Africa, this news must be very comforting.

* * *

Treatment-of-the-month for Parkinsonism: Artane (Lederle). This new synthetic has twenty times the antispasmodic potency of Trasentine and one-eighth the drying effect of atropine. Trial in 117 patients by Doshay and Constable (*J.A.M.A.*, 140:1317 [Aug. 27] 1949) led them to conclude that Artane is probably the drug of choice in Parkinsonism because of its cerebral stimulation, antisialorrhea effect, and unusual freedom from toxic effects.

* * *

Aureomycin is apparently effective against protozoa too. Entameba histolytica, both cysts and trophozoites, disappear from the stool after three days' treatment (McVay, L. V., et al.: *Science* 109:590 [June 10] 1949). There might be some hesitancy about giving this drug to a patient with severe amebic dysentery since aureomycin itself produces diarrhea in about 50 per cent of patients. It has been reported, however, that Trimeton given with aureomycin will prevent diarrhea due to the latter. Aureomycin should prove effective against amebic abscesses of the liver, according to McVay.

* * *

Another advance against amebiasis is the recent improvement of the standard arsenical, carbarsone. Carbarsone, which contains pentavalent arsenic, was found to be ten times as amebicidal when trivalent arsenic was substituted ("carbarsone oxide"). But this was too toxic (gastric irritation). Substitution of the sulfhydryl group for the oxygen detoxified the compound. The resultant thioarsenites have been tried in over 100 patients with amebiasis by Anderson, et al. (*J.A.M.A.* 140:1251 [Aug. 20] 1949.) Superior results were obtained using dosages only one-tenth to one-fifth as large as the customary dosage of carbarsone.

* * *

Amebiasis again: Emmett reports a cure of a moribund patient with a huge amebic abscess of the liver, draining through a sinus in the epigastrium, by the oral administration of chloroquine, ("Aralen"), one of the newer antimalarial drugs. (*J.A.M.A.* 141:22 [Sept. 3] 1949.)

* * *

Prickly heat can be cured by restricting salt intake and increasing fluid intake. Conversely, it can be induced by the ingestion of excessive sodium chloride during hot, humid weather, as shown by Horne and Mole at Karachi, India. (*Lancet* 257:279 [Aug. 13] 1949.)

* * *

Aerosol Benadryl (10 mg. per cc., supplied in sterile vials) controls bronchial asthma much more completely than oral antihistaminics, according to L. L. Friedman. (*South. M. J.* 42:491 [June] 1949.)

* * *

Spies, et al., report that vitamin B_{12}, given orally, is effective in the treatment of pernicious anemia, but only

when 30 to 60 times the usual parenteral dose is given. They recommend oral administration only when injections of B_{12} produce bad reactions. (*Lancet* 2:454 [Sept. 10] 1949.)

* * *

Pyridoxine intravenously, effective in the vomiting of pregnancy, also controls the **nausea and vomiting** which frequently result from the large doses of stilbestrol used in various pelvic disorders. (Patton, G. D.: *Am. J. Obst. and Gyn.* 58:595 [Sept.] 1949.)

* * *

Dramamine is highly effective in the prevention and treatment of **radiation sickness.** (Beeler, J. W., et al.: *Proc. Staff Meet. Mayo Clinic* 24:477 [Sept. 14] 1949.) Good results were obtained in 85 per cent of 82 patients. Better results were obtained when Dramamine (100 mg., orally, each hour for three doses at time of x-ray treatment) was combined with intravenous pyridoxine (200 mg.) than when either drug was used alone. The effectiveness of Dramamine in motion sickness and in radiation sickness is thought to be due to a specific depression of the vomiting reflex, and probably not by "antihistamine" action.

* * *

Sulfamethazine (dimethyl sulfadiazine) is recommended as a valuable **urinary disinfectant** by Rutenburg and Schweinburg (Surgery, 26:215, August, 1949). This sulfonamide has not produced crystalluria or renal complications since it is five times as soluble as sulfadiazine. Favorable response (cure or improvement) was obtained in 79 per cent of 24 patients, some of whom had not been benefited by sulfadiazine and streptomycin.

* * *

Histamine in sesame oil-beeswax has produced results in **peripheral vascular disease** far superior to what was achieved with the older intravenous-drip histamine or the more recent histidine-plus-ascorbic acid treatment. The histamine, 0.5 mg. in 1 cc. of menstruum, is released slowly, producing constant dilatation of capillaries and arterioles over a twenty-four hour period. Relief of intermittent claudication occurred in 41 of 72 patients and freedom from pain lasted for an average of 3 months after an 18 day course of therapy. (Greenblatt, I. J., *et al.: J.A.M.A.,* 141:260 [Sept. 24] 1949.)

* * *

Micropowdered aminophylline (particles 2 microns in diameter) gives quick relief of **bronchial asthma** when inhaled from an ordinary penicillin powder inhaler. Symptomatic relief and increased vital capacity (averaging 555 cc.) were obtained in 30 of 35 patients treated for about 5 months at Bellevue, by Taplin, et al. (*Ann. Allergy,* 7:513 [July-Aug.] 1949.) No fastness to inhaled aminophylline developed, and this drug is certainly safer than inhaled adrenalin. However, the high humidity here may detract from the practicability of micropowdered aminophylline, as it has with powdered penicillin.

C. A. Domzalski, Jr., M.D.

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RECENT ACQUISITIONS

Clinical Medicine

Conn, H. F., ed. *Current therapy, 1949.* c1949. (gift of publisher)

Yater, W. M. *Fundamentals of internal medicine.* 3rd ed. c1949. (gift of publisher)

Nervous System

Ogilvie, R. S. *Handbook of electroencephalography.* c1949. (gift of publisher)

Sachs, Ernest *Diagnosis and treatment of brain tumors and care of the neurosurgical patient.* 2nd ed. c1949. (gift of publisher)

Nursing

Baetjer, A. M. *Women in industry.* c1946. (from Nurses' Association)

Faddis, M. O. *Textbook of pharmacology for nurses.* 3rd ed. c1949. (from Nurses' Association)

Hansen, J. F. *Professional relationships of the nurse.* 2nd ed. c1947. (from Nurses' Association)

Macdonald, M. G. *Handbook of nursing in industry.* c1944. (from Nurses' Association)

Marsh, E. L. *Nursing care in chronic diseases.* c1946. (from Nurses' Association)

Ophthalmology

Duke-Elder, Sir W. S. *Textbook of ophthalmology.* v. 4. 1949.

Pediatrics

Davison, W. C. *Compleat pediatrician.* c1949. (gift of publisher)

Public Health

Colcord, J. C. *Your community.* 3rd ed. rev. c1947. (from Nurses' Association)

Galdston, Iago, ed. *Social medicine.* c1949. (gift of publisher)

Nyswander, D. B. *Solving school health problems.* c1942. (from Nurses' Association)

Smillie, W. G. *Preventive medicine and public health.* c1946. (from Nurses' Association.)

Surgery

Cole, W. H., ed. *Operative technic in general surgery.* c1949. (gift of publisher)

DeCourcy, J. L. *Pathology and surgery of thyroid disease.* c1949. (gift of publisher)

Tuberculosis

DiRienzo, S. *Radiologic exploration of the bronchus.* c1949. (gift of Tuberculosis Association)

Hayes, W. E., ed. *The fundamentals of pulmonary tuberculosis.* c1949. (gift of publisher)

Miscellaneous

Moon, J. R. *How to become a doctor.* c1949. (gift of publisher)

Tangney, M. E. *Diabetes and the diabetic in the community.* c1947. (from Nurses' Association)

* * *

The Library wishes to acknowledge a gift of money from Dr. Tell Nelson to be added to the previous donation of Dr. and Mrs. Edgar Childs in memory of Dr. Nelson Hatt. Dr. Robert L. Craig of Chicago also sent money for books to be purchased in memory of his father, Dr. Alfred L. Craig. The Library Committee have asked Dr. Dodge to make recommendations for the best possible expenditure of this money for purchase of books or journals in the field of orthopedics which will stand as permanent reminders of Dr. Hatt and Dr. Craig.

* * *

The Mayo Clinic Library recently sent us a list of journals which they receive currently. It is an impressive compilation of medical literature and the titles number approximately 1,400. In comparison our 360 journals seem infinitesimal, but "big oaks from little acorns grow."

* * *

There recently appeared in the August 1949 issue of the *Archives of Dermatology and Syphilology* an article by Dr. Harry L. Arnold, Jr. entitled "Erythema multiforme following high voltage roentgen therapy; review of the literature and report of three cases."

There also appeared in the June 1949 issue of the *Journal of Nervous and Mental Diseases* an article by Dr. J. Robert Jacobson and Helen Gay Pratt called "Psychobiologic dysfunction in children."

And in the December 1948 issue of *Archives of Dermatology and Syphilology* in the clinical notes Dr. Harold M. Johnson had an article, "Streptomycin ointment in treatment of sycosis vulgaris."

* * *

The Library wishes to acknowledge with thanks a gift of four hundred dollars from the Hawaii Cancer Society for the purchase of books and journals relating to cancer.

* * *

Perhaps it is not generally known to all doctors that the night assistant in the Medical Library is in most cases a pre-medical student from the University, since our budget does not allow us to hire a trained librarian for the evening hours. We can not expect research or reference services from an untrained assistant. If special references are needed by any doctors wishing to use the library at night, it is necessary that they call during the daytime when professional assistance is available, so that journals and books may be set aside for them.

BOOK REVIEWS

Obesity. By Edward H. Rynearson, M.D., F.A.C.P., and Clifford F. Gastineau, M.D. Pp. 144 with 9 figures and 16 tables. Price $3.50. Charles C. Thomas, Publisher, Springfield, Ill., 1949.

The authors have made in this small book a very comprehensive survey of the subject, with an imposing bibliography of 422 references. The discussion of the adverse influences of obesity in a great number of conditions carries with it a plea for physicians to be more zealous in its correction.

The statement: "Fat comes only from food, and obesity results only from eating more than is required to meet the energy requirements of the body," is established as axiomatic by a concise, but searching, consideration of a list of mechanisms which have been advanced as etiological factors in obesity.

The book becomes particularly useful because of the helpful data, tables and instructions presented for the physician to use in the management of problems of weight reduction. A brief discussion of psychological factors is adequate and to the point, and the evaluation of drug therapy and other procedures gives one answers for the faddists.

A. V. Molyneux, M.D.

Handbook of Electroencephalography. By Robert S. Ogilvie. Pp. 137, illustrated. Addison-Wesley Press Inc., Cambridge, Mass., 1949.

This book is written primarily as an aid to one interested in setting up an electro-encephalograph laboratory and running it. It makes no pretense to be an atlas of electro-encephalography. Its value lies in its simple explanation of practical details in housing, screening and calibrating the instrument, applying the electrodes, and other similar matters so vitally important to eliminating artifacts and obtaining satisfactory tracings.

The chapter on interpretation, while necessarily brief, gives useful information on the classification of and recognized abnormalities in electro-encephalograms. To the average physician it is an easy, quick reference in a relatively new and specialized field.

John J. Lowrey, M.D.

Operative Orthopedics. Two volume set, Campbell-Speed-Smith. Second Edition. Pp. 1600 with 1141 illustrations. Price $30.00. C. V. Mosby Co., St. Louis, Mo., 1949.

The first edition of this book was excellent. This second edition is better due to wise revision, additions, and some deletions.

Quality of presentation is paramount in writing on technique; these volumes have such clarity of text and of illustration. Inclusion of all known orthopedic procedures would have been impossible in 1600 pages. The author and editor included those techniques most widely used and generally advocated, and particularly those proven best by their wide experience. Rare and unusual conditions are included, but not rare and unusual procedures.

The new sections on peripheral nerve injuries, the herniated intravertebral disc, and amputations are especially good.

This is a work for orthopedists, men who do some orthopedic work, and residents who wish to learn specific techniques. Its thoroughness and completeness take one through preparations, the surgery itself and the after care. Some will object to two volumes, but the inconvenience of this form is partially overcome by general indexing on the cover of each volume. An author's index is new in this edition. This is a valuable and interesting edition to surgical literature.

T. Alan Casey, M.D.

Fundamentals of Internal Medicine. By Wallace M. Yater, A.B., M.D., M.S. (in Med.), F.A.C.P. Third Edition. Pp. 1451, with 315 figures. Price $12.00. Appleton-Century-Crofts, Inc., New York, 1949.

This book is primarily to make readily available in simple form for students and practitioners the essentials of the vast subject of internal medicine—but trying to present the minimum amount of knowledge of clinical medicine that a general practitioner should have at his finger tips.

The diseases are well grouped; i.e., the first chapter, "Diseases of the Heart," is subheaded as follows: Cardiac Reserve, Heart Failure, Cardiac Asthma, Pain in Diseases of the Heart, Technique and Value of Circulation Times and Venous Pressures, Etiologic Types of Heart Disease, Electrocardiography, Diagnosis of Heart Disease and Heart Failure, Treatment of Heart Disease and Heart Failure.

Each chapter gives an excellent itemization of headings listed with a good introduction. The one sour note I will add was my surprise at finding, in the chapter on "Peptic Ulcers," first the word peptic, which I thought was obsolete; and second, still treating a gastric ulcer as a medical condition when the whole experience with cancer of the stomach was such that as soon as a diagnosis of stomach ulcer has been made, it should immediately become a surgical condition, whereas the duodenal ulcer should be kept in the medical field. However, "since perfection is finality, and finality is death" perhaps even as good a book as this should not be expected to be perfection.

Nils P. Larsen, M.D.

Medical Clinics of North America, New York Number, Cardio-Vascular Diseases, Especially Hypertension. Pp. 607-922. Price $18.00 per clinic year in cloth, $15.00 per clinic year in paper binding.

This issue of the Medical Clinics, published bimonthly, follows the usual pattern, i.e., a series of articles on a selected subject by authors from one of the larger medical centers. This number, devoted to a symposium on cardiovascular diseases, especially hypertension, prepared by the New York Group, presents an interesting review of the practical aspects of hypertensive vascular disease. It does not present any new concepts. As a review, it would appear that the symposium should have included an article on the Kempner rice diet.

Space does not permit discussion of all of the articles. William Dock presents an excellent paper on angina

pectoris. Herman Elwyn discusses the changes in the fundus in hypertension. Maurice Bruger presents a short but excellent review of capillary fragility in hypertensive patients. Herman O. Mosenthal contributes an article in which he concludes that the conservative treatment of essential hypertension yields just as favorable results as any other form of treatment. Kermit L. Pines and George A. Perera present a paper which outlines the present status of sodium chloride restriction in hypertensive vascular disease. This should be read by all physicians who are treating patients with hypertension.

This symposium contains three articles on surgical treatment of hypertension. J. William Hinton and Jere W. Lord, Jr. discuss the selection of patients for thoraco-lumbar sympathectomy. This is yet another method of evaluating hypertensive patients in order to determine which patients will benefit by sympathectomy. Bronson S. Ray presents an analysis of the results of sympathectomy in three hundred cases. William Goldring and H. Chassis present a most interesting paper on sympathectomy and unilateral nephrectomy in the treatment of hypertensive diseases. They conclude that sympathectomy has a place in the ill-defined treatment of hypertension, but in view of its tentative rationale and the wide divergence of opinion, it must be regarded as an experiment as yet unfinished and that enthusiasm for unilateral nephrectomy in hypertension is distinctly on the wane. S. W. Hoobler, G. K. Moe, and R. H. Lyons present an outstanding paper on the experimental and clinical cardiovascular effects of tetraethylammonium.

F. H. MOWREY, M.D.

Social Medicine: Its Derivatives and Objectives. Edited by Iago Galdston, M.D. The New York Academy of Medicine Institute on Social Medicine, 1947. Pp. 294. Price, $2.75. The Commonwealth Fund, New York, 1949.

This serious and scholarly collection of essays will probably annoy the proponents of "social" medicine a great deal less than it will annoy the opponents of "socialized" medicine, but it seems likely to disturb both groups somewhat—which is a compliment. Material from such antithetic sources as Henry Sigerist ("From Bismarck to Beveridge") and Lord Horder ("The Appeal of the Common Man") is included, and the general air is dispassionate and objective; but by and large the concept of "socialized medicine"—though it is not mentioned by name—is caressed rather than lambasted. The tone of the whole collection is well conveyed by the titles of the first and last of the seven sections into which the twenty-six essays are divided: "Changing Concepts of the Relation of Medicine to Society," and "Social Medicine: the Appeal of the Common Man." The book will make pleasant and reassuring reading for social workers, and stimulating and perhaps somewhat disquieting reading for individualists in general and general practitioners in particular.

HARRY L. ARNOLD, JR., M.D.

Surgical Clinics of North America, Lahey Clinic, Surgical Technic. Pp. 631-971. Price $18.00 a year. W. B. Saunders Company, West Washington Square, Philadelphia, Pa., 1949.

This volume consists of 28 chapters on surgical technic and 2 chapters on technic of anesthesia.

In June, 1939 Lahey Clinic surgical staff wrote an excellent volume of *Surgical Clinics of North America* on surgical technic. It is interesting to compare the advances in surgery over this period of time. The newer surgical operations on the esophagus and cardiovascular system as well as the newer concepts of bowel surgery are included in this volume, which is well illustrated and so practical that it should be read by all doctors interested in surgery.

Dr. Lahey presents an excellent article on neck dissection for carcinoma of the thyroid. He continues to stress the importance of finding and isolating the recurrent laryngeal nerve in subtotal thyroidectomy. His descriptions and illustrations make this appear an easy procedure.

The newer operations for patent ductus arteriosus and coarctation of the aorta are described and well illustrated. The technic of total pneumonectomy is described and illustrated. Carcinoma of the breast is treated by a deep roentgen therapy after radical mastectomy. They believe this has increased five-year survival rates materially. The technic of radical mastectomy is well illustrated. Total gastrectomy technic is also beautifully illustrated.

Considerable progress has been made in recent years in the surgical treatment of diseases of the pancreas. Radical pancreotoduodenal resection technic was described in June, 1948 volume. This volume illustrates the technic of partial pancreatectomy: excision of the tail and body of the pancreas.

Practical and well illustrated technics of repair of incisional hernia and inguinal hernia are presented.

The operative procedures on gall bladder and common duct are presented. Technics of resection of the small intestine are well illustrated.

The technic of primary resection of the colon is well illustrated. Ten years ago, all patients treated in the Clinic for carcinoma of the colon had a two-stage modified Mikulicz type of operation. Now nearly all are treated by primary resection.

Treatment of prolapse of the uterus by several methods is described and well illustrated.

Presacral neurectomy is described and well illustrated. They report 90 per cent complete relief of all symptoms associated with menstruation in patients with primary dysmenorrhoea and 80 per cent in patients with secondary dysmenorrhoea.

Arthrotomy of the knee joint, fractures of tibial condyle and surgery of the acromio-clavicular joint are well illustrated. Two excellent chapters on technic of spinal anesthesia and endotracheal anesthesia are presented with illustrations.

KENNETH AMLIN, M.D.

Marihuana in Latin America, The Threat It Constitutes. By Pablo Osvaldo Wolff, M.D., Ph.D., M.A. Pp. 56. Price $1.50. Washington Institute of Medicine, 1708 Massachusetts Ave., N.W., Washington, D.C.

The late Calvin Coolidge once summarized a sermon on sin, which he had just listened to, by saying that the preacher was opposed to it. That is the gist of this book.

Like alcohol, benzedrine, barbiturate and narcotics, marihuana offers some sort of release to neurotic, psychotic or emotionally depressed persons. The reaction of the user to the drug is as unpredictable as in the case of alcohol.

The author makes several interesting points, however. The resin (active principle) content of the plant is higher in the tropics, and there are perhaps more persons who feel somewhat depressed there than in North America, for example.

He does not stress the important point that withdrawal is always harmless. His references to the association between addiction and psychotic states rather im-

plies that addiction causes psychoses such as schizophrenia. As good a case for the reverse can easily be made out, I think.

Marihuana addiction is much less of a problem than alcoholism in most of the world at least. Unfortunately, anyone can raise his own in the back yard or a flower pot or two.

More fuss is made about marihuana than the subject warrants in the writer's opinion.

H. L. ARNOLD, SR., M.D.

Textbook of Pharmacology for Nurses, Third Edition, by Margene O. Faddis, R.N., M.A., and Joseph M. Hayman, Jr., B.A., M.D. Pp. 443, 63 illustrations. J. B. Lippincott Co., Philadelphia, Pa., 1949.

This book has several advantages over older books in this field, one of which is its handy size. The illustrations in the chapter on completing dosages are simple, clear and direct. The self scoring tests and good bibliographies should be of great help to student and teacher both. The emphasis on the welfare of the community as found in Unit nine where consumer protection is discussed is both apropos and well done.

ESTHER CONROY, R.N.

Diagnosis and Treatment of Brain Tumors and Care of the Neurosurgical Patient. By Ernest Sachs, M.D. Second Edition. Pp. 552 with 348 illustrations and 10 color plates. Price $15.00. C. V. Mosby Company, St. Louis, Mo., 1949.

This book, by one of the senior neurosurgeons in the country today, combines in one volume the material previously covered in his book on *Brain Tumors* published in 1931, and *The Care of the Neurosurgical Patient* published in 1945. From a wealth of experience, teaching and practice Dr. Sachs has written a book valuable to the entire medical profession and nurses as well as persons specializing in the field of neurosurgery. The material is presented in a concise manner with an abundance of case histories, operative notes, x-rays, drawings and photographs to illustrate the points under discussion. Numerous references are made to the literature for readers who wish further information. A detailed table of contents and index add to the value of the book as a reference work. Any intern, resident or nurse caring for neurosurgical patients will find this book of great value and any physician interested in the subject will find a difficult subject thoroughly covered with actual cases to elucidate the problems.

JOHN J. LOWREY, M.D.

Medical Clinics of North America, Mayo Clinic Number, Gastro-Intestinal Conditions. Pp. 923-1210. Price $18.00 per clinic year in cloth, $15.00 per clinic year in paper binding. W. B. Saunders Company, West Washington Square, Philadelphia, Pa., 1949.

This issue by the members of the Mayo Clinic is divided into two sections, the first a brief one containing five articles on gastro-enterology, and the second a miscellaneous assortment.

In the section on gastroenterology, The Treatment of Ulcerative Colitis with Salicylazosulfapyridine (Salazopyrin), by J. A. Bargen, is an enthusiastic report on the efficacy of this new Swedish drug in the disease.

Relapsing Pancreatitis, by E. E. Gamhill, is a clear, concise summary of our present-day knowledge of the subject, and brings one well up on the current status of the disease.

In the following section three articles are interesting. H. M. Odel summarizes the handling of acute anuria as promulgated by Muirhead. He subscribes to Muirhead's three stage program.

Of the last two articles, one, The Electrocardiogram in Congenital Heart Disease, provides some detailed, but not too technical material of interest to both cardiologists and pediatricians; the other, on Congenital Tricuspid Atresia, is a masterpiece of clarity that is well worth preserving for reference material.

R. M. DEHAY, M.D.

COUNTY SOCIETY REPORTS

HONOLULU COUNTY MEDICAL SOCIETY

The September meeting of the Society was held as usual on the first Friday of the month in the Mabel Smyth Auditorium. Dr. Arnold, Jr., presided; about 78 members and guests were present.

Dr. I. L. Tilden introduced Miss Esther Lo, Cytology Technician at the Hawaii Cancer Society.

The scientific program was presented by the staff of the Leahi Hospital for Tuberculosis. Dr. Hastings Walker discussed streptomycin in the treatment of tuberculosis, and Dr. F. L. Giles discussed the paper; Dr. Robert Marks' paper on Tuberculosis Trends was discussed by Dr. N. P. Larsen, and Dr. Perlstein discussed the laboratory diagnosis of tuberculosis.

The amendment to the By-Laws creating a status of Associate Membership to replace retired, non-resident, interne and service memberships, which had been read at the previous meeting (HAWAII MED. J. 9:42 [Sept.-Oct.] 1949), was passed without a dissenting vote. An additional amendment was proposed, as follows:

> "Chapter I, Section 2 (b) (3)—Inactive members shall not be eligible to vote or hold office."

Dr. Arnold announced that Dr. John Upton of the California Blood Bank Commission had donated a pint of blood to start the Blood Bank Reserve of the Honolulu County Medical Society, and that one more pint had been donated. Further donations were invited.

The following recommendations by the Board of Governors were presented for action:

1. That the present Fee Schedule Committee, consisting of six members, be designated as the Fee Adjustment Committee.
2. That at each subsequent annual meeting two members of that committee be replaced by nomination and ballot from the floor at the time of the annual election.
3. That the Fee Adjustment Committee be empowered to negotiate the new fee schedule section by section with the HMSA without returning to the Medical Society for approval of each individual change.

The recommendations were accepted by unanimous vote.

The president relinquished the chair to Dr. Rodney West, chairman of the Fee Adjustment Committee, for the remainder of the meeting. No action was taken on a letter from the New Jersey Medical Society relevant to increasing life insurance examination fees. The section of the new fee schedule dealing with obstetric and gynecologic fees was passed on second reading with one amendment, namely, that the fee for prenatal care and delivery be $125, and that if the patient is not delivered by her doctor, he charge for the prenatal visits at regular office visit rates. The fee schedule for x-ray and general surgery was presented for first reading, and passed with minor changes in terminology.

* * *

The October meeting of the Society was held on the usual day at the usual time and place; Dr. Arnold, Jr., presided; about 70 members and guests were present.

A Community Chest movie, *Follow Your Dollar,* was shown, and the membership agreed to cooperate with the Chest by circulating all pledge cards not otherwise distributed to the members and collecting the pledges.

Dr. Frank Spencer spoke on Prolonged Labor, and the topic was discussed by Drs. K. S. Tom and Lyle Bachman. This was followed by a talk on Sexual Sterilization by Dr. Rodney West and Dr. D. D. Warden.

The President reported that the Society's Blood Bank Reserve had been reduced from 2 pints to one by one withdrawal, and suggested that further volunteers would be welcome.

Dr. Fred Irwin requested the passage of a resolution by the membership, agreeing to abide by the C plus 10 per cent fee schedule for treating HMSA cases. No action was taken, however, it being pointed out that such an agreement was already in effect.

The Society unanimously ratified the Board of Governors' recommendation that all members give physical examinations and routine immunizations to National Guard recruits without charge, upon request.

The amendment to the By-Laws proposed at the previous meeting [v.s.] was unanimously passed.

It was announced that the County Society Library was urgently in need of funds wherewith to accelerate the periodical-binding program, and donations were invited, particularly from those members who had never, for whatever reason, made contributions to the Library Endowment Fund.

The President relinquished the chair to Dr. Rodney West, Chairman of the Fee Adjustment Committee. The General Surgery and X-ray fee schedules were passed at their second reading and the Extremities and Spine schedule was accepted on first reading.

JOHN WM. DEVEREUX
Secretary

MAUI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Society was held on August 16 at the Maui Grand Hotel. Dr. Underwood presided; 15 members were present, and Dr. Quisenberry of the Board of Health was the guest.

Dr. Izumi reported the purchase of a slide projector and screen, financed through the kindness of Drs. Strode, Johnston, Wiig and Hill, who refused their travel expenses to the December, 1948 meeting in order to make this purchase possible.

A change in the By-Laws increasing annual dues from $32.50 to $37.50 was passed on first reading, final vote to be taken next month. Another change was also approved, to provide that the offices of the three Governors-at-Large be automatically filled by the past three living and resident ex-Presidents of the Society.

Appointment of a Public Service Committee was made, as follows: Dr. St. Sure (chairman), and Drs. Sanders, Izumi, Cole, E. Kushi, Rockett and (ex officio) McArthur.

The following resolutions were proposed and unanimously passed:

> *Whereas,* the United States has the highest standards of health, of medical care, and of scientific medical facilities of any country in the world, as a result of our system of free enterprise; and
>
> *Whereas,* compulsory health insurance, wherever tried, has caused a decline in national health and deterioration of medical standards and facilities; and
>
> *Whereas,* wherever the government has assumed control of medical services, the result has been tremendous multiplication

of costs over original estimates, extreme tax burdens, and national deficits, and gradual extension of socialization into other activities of national life, now, therefore,

BE IT RESOLVED, That the Maui County Medical Society does hereby go on record against any form of compulsory health insurance or any system of political medicine designed for national bureaucratic control; and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to the President of the United States, to the Delegate to Congress from the Territory of Hawaii and that said Delegate be and is hereby respectfully requested to make every effort within his power to prevent the enactment of any such legislation.

Whereas, Extension of "social security" to the self employed of the United States is under consideration by the 81st Congress; and

Whereas, Provision for the exigencies of old age is an individual matter which should be left to the decision of self-employed individuals on a strictly voluntary basis; and

Whereas, So-called "social security" is in fact a compulsory socialistic tax which has not provided satisfactory insurance protection for individuals where it has been tried but, instead, has served as the entering wedge for establishment of a socialistic form of government control over the lives and of the people; and

Whereas, The private insurance companies of the country offer a great variety of programs which are available to individuals according to their individual requirements and desires; now, therefore,

BE IT RESOLVED, That the Maui County Medical Society does hereby go on record disapproving of any extension of so-called "social security" to self-employed individuals, including physicians and surgeons; and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to the President of the United States, to the Delegate to Congress from the Territory of Hawaii and that said Delegate be, and is hereby respectfully requested to make every effort within his power to prevent the enactment of any such legislation.

Dr. Patterson discussed the coming Plantation Physicians' Meeting, November 17 to 20, and extended an invitation to all physicians, plantation and non-plantation, to attend.

Dr. Walter Quisenberry discussed the Papanicolaou technic in cancer detection and showed a movie illustrating the use of the Ayre spatula for taking surface biopsies.

ROBERT F. COLE, M.D.
Secretary

HAWAII COUNTY MEDICAL SOCIETY

The 288th regular meeting of the Hawaii County Medical Society, the semi-annual meeting, was held at the Kona Inn, Kailua, Hawaii, on September 18; the hosts at this dinner meeting were the doctors from Kona and Kau.

A letter from Dr. Harry Arnold, Jr., president of the Honolulu County Medical Society, addressed to Dr. Crawford, but a copy of which had been sent to Dr. Tomoguchi, was read. Dr. Arnold stated that the only reason for his society attacking the fee schedule problem on the County Society level was because of the recent trouble which prevented the passage of a fee schedule formulated by a Territorial Association committee. In this respect, Dr. Crawford stated that he was attending the Board of Governors' meeting of the Honolulu County Medical Society to be held on September 27, 1949.

Dr. Orenstein spoke about the financial condition of the HMSA during the last 4 to 6 months. He stated that HMSA was our baby and that it was up to the doctors, especially in regard to pre-existing conditions, to give HMSA a fair chance. He stated that the Board of Directors of HMSA planned to close the Hilo office but that he was against this. He stated that there is an unsatisfied demand for policies here and that (1) a qualified and aggressive personnel in Hilo, (2) selling insurance on a commission basis would help the situation locally.

The meeting ended at 7:50 p.m. After that the Kona and Kau doctors took over and treated us to a delicious dinner and an evening of entertainment.

* * *

A special meeting of the Society was held on September 27, 1949, at the Naniloa Hotel. The dinner meeting was held to hear an address by Dr. Richard S. Dodge of Honolulu.

A short business meeting was held and a letter from Dr. R. B. Faus, in his capacity as colonel, M.C. of the Hawaii National Guard, was read. In this, he stated that the National Guard was in serious need of the doctor's assistance and cooperation. After a short discussion, it was moved by Dr. Phillips, seconded by Dr. Fernandez, and unanimously approved by the members present, that the secretary be instructed to write to Dr. Faus notifying him that this Society will help but that we would appreciate more definite information regarding the help that we could give.

Dr. Richard Dodge spoke on "Congenital Dislocations of the Hip" and illustrated his talk with lantern slides.

ROBERT M. MIYAMOTO, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held in the library of the Wilcox Memorial Hospital on September 14, at 7:30 p.m. The meeting was called to order by President Masunaga.

A letter from Mrs. Edith Bennett, Executive Secretary, was read and discussed concerning representation for various committees. The committees are as follows:

Psychiatry Committee—Chairman, Dr. Sam Wallis. Dr. Wallis will act as chairman for this committee until Dr. Steuerman is accepted as a member of the Kauai County Medical Society.
Cancer Committee—Chairman, Dr. Clyde Ishii.
Health and Education Committee — Chairman, Dr. Patrick Cockett.

Dr. Goodhue moved that we accept Dr. Bieber's application for membership. Dr. Kuhns seconded. An agreement was reached that a letter be written to Mrs. Bennett, notifying her of Dr. Bieber's application.

Suggestions were voiced to have specialists brought to Kauai at our expense during our monthly meetings.

As chairman of the Cancer Committee, Dr. Ishii requests concrete suggestions as to how the cancer money may be used for future development against cancer.

K. K. FUJII, M.D.
Secretary

NOTES AND NEWS

PERSONALS

DR. RICHARD K. C. LEE, assistant health executive of the Territorial Department of Health, has been honored by being certified as a Founder Member of the recently organized American Board of Preventive Medicine and Public Health.

DR. CHARLES E. WILBAR, JR., president of the Territorial Department of Health, has likewise been cited as a Founder Member of this new specialty Board.

DR. SHIGERU R. HORIO, who recently completed medical residencies at the Kuakini and Queen's Hospitals, Honolulu, has moved to San Francisco where he will practice his specialty of internal medicine.

DR. K. C. CHOCK, of Honolulu, has returned from a vacation in California, during which time he studied at the San Francisco hospitals.

DR. FREDERICK M. K. LAM has joined his father, DR. FRED LAM, and DR. RICHARD YOU in the practice of medicine and surgery in Honolulu. DR. LAM is a native of Honolulu and was graduated from Hamilton College, Clinton, N. Y., and from St. Louis University Medical School, St. Louis, Mo. in 1947. His interneship was at The Queen's Hospital, following which he took the mixed residency there. Prior to practicing in Honolulu he worked at Kohala Plantation Hospital for three months.

DR. SUMNER PRICE, medical director of The Queen's Hospital has returned following an extensive mainland trip, which included visits to Canada, Oklahoma and New York, and points between.

DR. HON CHONG CHANG, formerly of Lihue, Kauai, has opened his offices for the practice of roentgenology and radiology on the second floor of the new Gaspar-Vasconcellos Medical Building, in Honolulu. DR. CHANG is a graduate of the University of Hawaii and of the Jefferson Medical College in Philadelphia, in 1937. His interneship was at the Montgomery County Hospital, Norristown, Pennsylvania. After spending three years in general practice in Lihue, he entered the Army Medical Corps in September, 1941 and was discharged as a Captain in 1946. He served in various theatres in the South Pacific. In 1946 he was on the staff of the Leahi Hospital, Honolulu, following which he attended the University of Pennsylvania Graduate School of Medicine, taking one year of training in radiology. Two years of residency in radiology followed at the Presbyterian Hospital, Philadelphia. DR. CHANG has been certified by the American Board of Radiology and is a Fellow of the Radiological Society of North America. In addition to his private practice he is a part-time consultant in radiology to the Leahi Hospital.

DR. THOMAS F. FUJIWARA, of Honolulu, has returned to his practice following a post-graduate course of study in internal medicine at the Massachusetts General Hospital, Boston, Mass., and in hematology at the Pratt Diagnostic Hospital, Boston, under Dr. William Dameshek. He also attended the AMA meeting in Atlantic City and visited other medical centers.

DR. GROVER H. BATTEN has completed his surgical training and is now associated with DRS. BATTEN AND BELL, Dillingham Building, Honolulu, where his practice is limited to general surgery. DR. BATTEN is a native of Honolulu and was graduated from the Washington and Lee University, Lexington, Virginia and from the Johns Hopkins University Medical School, Baltimore, in 1942. During his interneship at the Cincinnati General Hospital he also carried out surgical research on the war wound study of the National Research Council. After serving thirty-seven months in the Army Medical Corps, most of which time was spent in the Mediterranean Theatre of Operations, he was discharged as a Major. On returning to Honolulu in 1946 he became a surgical resident at The Queen's Hospital, and has recently finished as chief surgical resident, for the past year.

DR. MERVEN CHUN, a native of Honolulu, has opened his offices in the Alsup-French Building, Honolulu, for the practice of general medicine and surgery. DR. CHUN received his pre-medical education at the Tulane University, New Orleans, and likewise was graduated from the Tulane University Medical School, in 1947. His interneship was at the Aultman General Hospital, Canton, Ohio until his return to Honolulu in July, 1949.

A second daughter, Cynthia Ann, was born to DR. AND MRS. LAURENCE WIIG at St. Francis Hospital on October 12. The Wiigs also have two sons.

Kauai

On June 30, DR. JAMES MASON left the Lihue Plantation Co. and returned to the Mainland where he is now practicing in Ainsworth, Iowa. During his stay here he was an active member of the County Medical Society with duties as secretary-treasurer and associate editor for the HAWAII MEDICAL JOURNAL.

DR. M. BRENNECKE, of Waimea, has just returned from a trip to the Coast where he spent about a month vacationing at various places.

The warm August sun found DR. D. CHISHOLM and his family vacationing down at their beach home in Wainini. During his absence, DR. GOODHUE took charge of the Mahelona Hospital. Dr. Goodhue also took a vacation, after Dr. Chisholm's return, in Honolulu.

In the second week of September, DR. H. BOWLES came to Kauai and gave a clinical conference on obstetrics. DR. PAULINE STITT also, in the same conference with Dr. Bowles, spoke on premature babies.

DR. C. L. WILBAR, JR. visited Kauai during the latter part of September in conjunction with the work of the Board of Health.

DR. K. K. FUJII has replaced DR. MASON as associate editor for the HAWAII MEDICAL JOURNAL.

Hawaii

DR. WILLIAM F. LESLIE, medical director of the Puumaile Hospital, Hilo, has returned after four months' vacation on the mainland. He attended the meeting of the American College of Chest Physicians and studied at various hospitals in Detroit and Brooklyn. In addition he found a number of spots to carry on his hobby of fishing.

Dr. Rollin S. Fillmore, Jr., of Kohala. has returned after taking a vacation, during which time Dr. Frederick M. K. Lam, of Honolulu, relieved him in his practice.

Mrs. Yamanoha, the wife of Dr. S. Yamanoha, passed away on September 24, after a prolonged illness.

Dr. Joseph Molloy, formerly with the Puumaile Hospital, left in September to become plantation physician for the Libby, McNeill and Libby Pineapple Company, at Maunaloa, Molokai.

Due to long and hard work on the part of Dr. Leo Bernstein and Dr. Archie Orenstein, meat inspection became a reality on the Big Island. They were instrumental in drawing up and urging the passage of the Meat Inspection Ordinance.

Correction

Dr. Dorian Paskowitz was appointed assistant chief of the Bureau of Venereal Disease and Cancer Control, Territorial Department of Public Health, under Dr. Walter Quisenberry. In the last issue Dr. Paskowitz was erroneously called chief of the Venereal Disease Bureau.

NEWS

American College of Surgeons

The fall scientific meeting of the Honolulu Chapter of the American College of Surgeons was held in the Mabel Smyth Building in September. Dr. Grover A. Batten, president of the Chapter, was chairman of the session. Scientific papers as follows were given by the following Fellows of the College: Dr. Ralph B. Cloward, Surgical Treatment of Subdural Hematoma; Dr. Thomas H. Maeda, Cancer of the Stomach; Dr. H. McLeod Patterson, Carcinoma of the Vulva; Dr. O. D. Pinkerton, Modern Concepts of Glaucoma; Dr. Robert T. Wong, Acute Optic Neuritis.

Hawaii Eye, Ear, Nose and Throat Society

At the fall meeting of this society which was held at the Tripler General Hospital, scientific papers were presented by Lt. Col. J. H. King, Jr., Chief of EENT Service, on the subject of "The Treatment of Pterygium," and by Major A. K. Brown, Assistant Chief of the EENT Service, on the subject of "Esophageal Obstructions."

Dr. Robert T. Wong, of Honolulu, is the current president of the Society, and Dr. O. D. Pinkerton is the Secretary.

Hawaii Cancer Society

At the annual meeting of the Cancer Society in September, officers for the coming year were elected as follows: President, Mr. Alexander S. Atherton; Vice-President, Dr. Grover A. Batten; Secretary, Mr. Carl I. Flath and Treasurer, Dr. Laurence M. Wiig.

The following physicians were elected to serve on the Board of Directors, in addition to the above: Dr. Harry L. Arnold, Jr., Dr. Phillip A. Arthur, Dr. I. L. Tilden, Dr. Thomas F. Fujiwara, Dr. Frank C. Spencer, Dr. Walter Quisenberry, Dr. Richard Sakamoto, Dr. A. Leslie Vasconcelles, Dr. Thomas Bennett, Dr. K. S. Tom, Dr. Fred K. Lam, Dr. Samuel L. Yee and Dr. Lester Yee, all of Honolulu. Dr. C. H. Ishii, of Lihue, Kauai, is the representative for the Kauai Cancer Society. The Maui and Hawaii Directors have not yet been nominated at the time of going to press.

Correspondence

To the Editor:

Would you publish the following request?

The study of twins is of great value in providing information concerning the respective importance of hereditary predisposition and environmental influences in disease in man. The results of the use of this method have shown a hereditary predisposition to tuberculosis, diabetes, and tumor formation, and a high, medium or low intelligence quotient.

There is some *a priori* evidence showing an hereditary predisposition for peptic ulcer. Only six cases of the occurrence of peptic ulcer in the one or both of mono- or dizygous twins have been reported in the readily accessible literature. Since twins are born in 1 of 86 births and identical twins in 1 of 344 births and the general incidence of ulcer is from 5 to 10 per cent there should be plenty of material available.

I should like to ask physicians to cooperate in assembling such material by sending me cases in which (1) one or both twins develop peptic ulcer, (2) the site of the ulcer, (3) the age of onset of ulcer, (4) the type of twins (monovular or diovular), (5) the sex of the twins, (6) the date of birth of the twins, and (7) the number and age of the brothers and sisters and the absence or presence of ulcer in each.

Yours sincerely,

A. C. Ivy, M.D.

University of Illinois,
1853 West Polk Street,
Chicago 12, Illinois

Scientific Council—American Heart Association

Eligibility for membership in the Scientific Council of the American Heart Association has been announced by Charles A. R. Conner, Medical Director, in a communication to Dr. Harry L. Arnold, President of the local Heart Association.

All who have made significant contributions to the knowledge of cardiovascular diseases are eligible for membership in the Scientific Council, provided they are or become members of the American Heart Association. Such members need not be qualified specialists in cardiovascular diseases. Representatives of other medical specialties (particularly internists, pediatricians, surgeons), physiologists, physicists, chemists, statisticians, or other scientists who have made contributions to cardiovascular research are eligible.

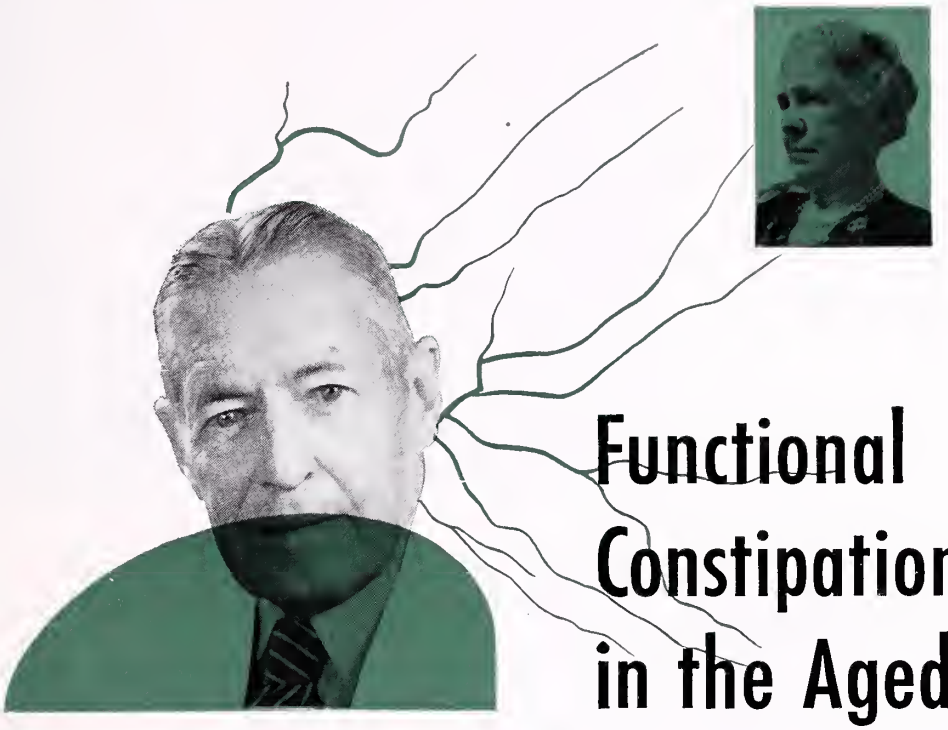
Members of the Hawaii Heart Association automatically become members of the American Heart Association.

The Hawaii Heart Association is at present engaged in setting up a program for the Territory with the aid of workers in the professional fields which play a part in the care and treatment of heart patients. Suggestions for program are solicited from individual physicians and the county societies by the Program Committee, of which Dr. Louise Childs is Chairman.

The Officers and Members of the Board of Directors of the local Heart Association at present are:

Dr. Harry L. Arnold, Sr., President
Dr. William O. French, Vice-President
Dr. Henry C. Gotshalk, Vice-President
Ronald B. Jamieson, Vice-President
Dr. Alfred S. Hartwell, Secretary
Dr. John L. Bell, Treasurer
Walter F. Dillingham, Cyril F. Damon, Dr. Homer M. Izumi, Urban E. Wild, Dr. Grover A. Batten, Esmond I. Parker, Mrs. E. E. Black and Herman Luis, Members of the Board.

Communications to the Association should be addressed to Drs. Arnold or Hartwell.



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*Werner, A. A.: The Climacteric in Women and Men, Pastgrad. Med. 4:102 (Aug.) 1948.

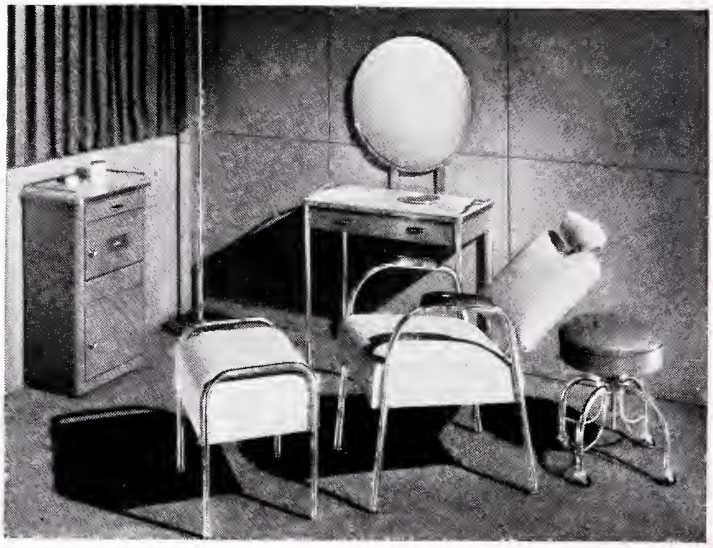
ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

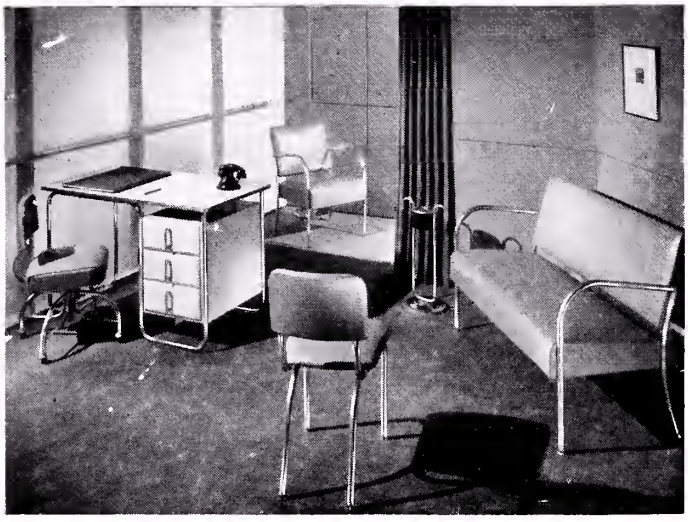
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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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INTRODUCING OUR EXECUTIVE SECRETARY

Mabelclaire Ralston Norman has been appointed joint executive secretary for the Nurses' Association, Territory of Hawaii and The Board for Licensing of Nurses.

Mrs. Norman took her pre-nursing course at San Jose State College and her three year nursing studies at Highland School of Nursing in Oakland. She had work in nursing education at the University of California at Berkeley and took her degree in nursing education at the University of Washington in Seattle.

From 1939 to 1941 Mrs. Norman was teaching supervisor at French Hospital in San Francisco and from 1941 to 1943 supervisor of medicine and instructor at Highland Hospital. She joined the Navy Nurse Corps in 1943, spending some time in San Francisco, Bremerton and the South Pacific. From 1946 to 1948 she was nursing education director of Knapp College School of Nursing, in Santa Barbara.

Since her arrival in Hawaii Mrs. Norman has organized the counseling and placement service of the Nurses' Association.

EXECUTIVE SECRETARY'S MESSAGE

Greetings from your new executive secretary! Though by now I feel far from new, this is my first opportunity to greet all of you. I received a most royal welcome on my arrival and was soon made to feel very much at home here.

I am so very pleased and proud of the job you nurses have already accomplished in the Islands and am anxious to help in every way possible.

We are making rapid strides in setting up the Counseling and Placement Bureau for the use of all nurses, doctors and institutions. Before long it should be possible to become a part of the National Bureau. We are doing a great deal of counseling in an effort to help nurses find the right position and wish to encourage each one to avail herself of this service.

The Board for the Licensing of Nurses also claims part of my time and I find the work interesting and stimulating.

I would like to congratulate you on a most successful convention. It was the best I have ever attended and I think the program was exceptionally well-rounded and presented. Growing out of this, we hope in the very near future to formulate a program of economic security for nurses. It is a vital problem to all nurses and the cooperation of each one will be necessary to promote this project successfully. Many states have already firmly adopted such a program and it is time now for us to work on our plans.

I am anxious to meet all of you and would be happy to talk with you should you come by the office. I expect to visit the other Islands soon and have an opportunity to see and talk with the nurses there.

Remember, this is your Association and I am here to help you in any way I can, but I will need your help too. I'm counting on all of you to continue your very loyal and conscientious efforts for the betterment of our profession.

Cordially yours,

MABELCLAIRE R. NORMAN

THE ANNUAL CONVENTION

The Eighteenth Annual Convention was generally regarded as one of the most stimulating in the history of the Association. The House of Delegates went on record with a standing vote of thanks to the Program and Arrangements Committees for the excellent planning and preparation and adopted resolutions to

1. Appoint a committee to investigate the possibilities of interesting a foundation in sponsoring a research project on the differentiation of nursing functions and utilization of the health team so that recommendations can be made to the Board of Directors for nursing requirements in the Territory in the immediate future.
2. Request the Hawaii League of Nursing Education, acting as a nursing education committee for the Territorial Nurses Association, to explore the possibilities of offering institutes under the sponsorship of the Association.
3. Appoint a committee to seek methods of gaining the cooperation of employers of nurses and organizations that might be interested in the development of personnel policies that will contribute to employment stability of nurses in the Territory.
4. Accept the offer of the Hawaii Cancer Society to conduct institutes on all the Islands.
5. Express in a letter of sympathy to Miss Sarah Mathews on the loss of her sister, Stella, the appreciation of the Association for the outstanding contributions she made to the nursing profession during her years of work in the Islands.
6. Forward letters of appreciation to the speakers, exhibitors, organizations, schools of nursing, business firms, district associations, friends of nursing and the press, in the name of the members of the Nurses Association, Territory of Hawaii.
7. Appoint a committee to investigate the advisability of requiring all nurses to have annual chest x-rays at the time of registration renewal and make recommendations to the Board for Licensing of Nurses.
8. Set the date of the annual convention for the latter part of September or early part of October to avoid conflict with the re-opening of schools.

DUES AGAIN!

According to a survey made by the New York State Nurses' Association, covering the amount of dues retained by state associations, Hawaii, which retains $11 for actual expenses of the Association, ranks tenth. That is, there are nine states which retain more than this amount. It is to be noted that they are among the most progressive associations.

Hawaii because of its limited population must have fairly high dues in order to support the type of service which an association must have in order to be effective. Each district sends the Territorial Nurses Association $17 per member. Of this, $3 goes to ANA, $1 to the Nursing Service Bureau, through which the Association operates a counseling and placement service, $2 pays for the HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN and $11 remains to cover rent, telephone, salaries of office personnel and other expenses.

When you send in your $21 for 1950, Nurses, remember to congratulate yourselves on being among the most progressive members of the profession. Don't forget that dues are delinquent after January 15 and that an additional dollar will be necessary for re-instatement. After March 15 it will be necessary for the membership to vote on re-instatement.

However, 1949 has already proven that most of you belong to the pay-dues-early-and-get-it-over-with-group.

DID YOU KNOW THAT . . .

MARJORIE ELLIOTT, R.N., B.S., Instructor in charge of the Practical Nurse Training Course of the Department of Public Instruction, attended a six weeks workshop at Wayne University in Detroit from September 21 to October 21? Mrs. Elliott reported there were only six students in the workshop—one each from Finland, North Carolina, Alabama, Toronto, Canada, Detroit and Honolulu.

MARY ROBERTS, editor of the American Journal of Nursing since 1920, retired this year? She was the second editor of the Journal, Sophia Palmer having served from 1900 when it was first published, to her retirement in 1920.

ANNE M. FISHER, former president of the Hawaii League of Nursing Education, is now professor in the nursing department of the University of Pittsburg?

LORETTA SCHULER is now director of the Home Nursing Department of the Hawaii Red Cross?

MRS. PATTERSON MORRIS, Industrial Nurse with Hawaiian Electric Company, was elected to the office of third vice-president in the American Association of Industrial Nurses? She attended the Board of Directors' meeting in Memphis, Tennessee, September 23, 24 and 25 and reported that it was an extremely interesting event and contact with industrial nurses from all over the country was stimulating and thought provoking.

Territorial Board examinations were given to 120 nurses in October? Because of the large number, the examinations were conducted in the Community Room of the YWCA. The new series put out by the National League contains only five sections and is now in more integrated form with chemistry, microbiology, nursing arts, professional problems, pharmacology and social foundations incorporated in each of the major sections.

NEW OFFICERS

New officers of the Nurses' Association, who will serve during 1950-51 are: HARRIET KUWAMOTO, Vice-President; ALISON MCBRIDE, Secretary; MARY JANE MCDONALD, Director from the Island of Hawaii.

CANCER INSTITUTE

An institute on cancer will be presented on all of the islands early next spring, according to present plans. This will be sponsored by the Nurses' Association, Territory of Hawaii, in cooperation with the Cancer Society, and will be arranged on each island through the district Nurses' Association.

Arlene N. Thompson, president of the Hawaii League of Nursing Education, is chairman of the joint committee to plan the institute. Other Nurses' Association representatives are Mabelclaire Norman, executive secretary of the Nurses' Association, and Mildred Manty.

This institute will meet one of the requests made during the annual meeting of the Territorial Association.

GENERAL DUTY STAFF NURSE SECTION

Organization of the General Duty Staff Nurse Section of the Territorial Nurses' Association began on January 13, 1949 at which time a chairman was elected to represent the group at the ANA conference on Economic Security for Nurses, held in Chicago in February 1949. The chairman-delegate, Miss Frances Kupau of Children's Hospital staff, returned from this meeting filled with enthusiasm and ambition for the development of the General Duty Staff Nurse Program in the Territory.

In her report for 1949 Miss Kupau stated that greater participation on the part of general duty staff nurses would be necessary to make possible the setting up and maintenance of minimum standards for personnel policies in hospital. It is realized that the rapid turn-over of general duty nurses in the Territory creates an attitude of disinterest in a program that will not affect many of them directly. However, committees of the section are hard at work on standards which it is hoped to have completed by January 1950. The objective of improved working conditions for nurses to provide improved nursing care for patients is one to which nurses and hospitals should be willing to contribute full support.

PRIVATE DUTY NURSE SECTION

The report submitted by Miss Elvera Hamilton, Secretary, outlined an active program carried out by the Section during 1949. Beginning in January with the election of officers and appointment of a delegate, Miss Lillian Jonsrude, to the ANA Conference in Chicago in February, subsequent meetings included a discussion of oxygen therapy given by Mrs. Burley of Queen's Hospital, consideration of the registered nurse-practical nurse relationships in hospitals, mal-practice insurance with Miss Virginia Jones as guest speaker, the decision to deny Nurses' Registry privileges to private duty nurses delinquent in Association dues, a vote to volunteer Blood Bank replacements and nursing service to nurses in need.

Correspondence was conducted with the Private Duty Section of the California State Nurses' Association regarding mal-practice insurance to aid in dealing with the problem in the Territory.

Section meetings will be resumed on the old schedule, the Monday of the regular City-County Association session.

OAHU HEALTH COUNCIL

The Oahu Health Council completed its sixth year of activities in June 1949. During the past year the Council has grown from a membership of 60 agencies to a representation of 67 groups and 56 individuals.

Five standing committees, Executive, Program, Legislative, Education and Membership, with numerous subcommittees, have carried on active programs throughout the year. A study committee has begun a survey of nursing needs in the community.

Educational activities of the Council have been directed toward publicizing community health problems and needs brought out in Council programs as well as assisting member agencies in their individual educational campaigns. The Council has used radio dramas and spot announcements as well as car cards, film strips, monthly bulletins, exhibits and magazine articles in addition to the regular monthly meetings.

The topics covered at the meetings include: Sanitation, Need for a Rehabilitation Center, Voluntary Health Insurance Plans, Health Legislation, The State of Nutrition of the People of Hawaii, Home Care of the Ill, Juvenile Delinquency on Oahu, and Dental Health of the Children of Hawaii, by panels of speakers representing the interested people in the various fields. At the June meeting Dr. Harry L. Arnold, Jr. spoke on

the subject, "Yesterday and Tomorrow in Community Health."

There has been a great deal of interest shown in the many subjects that were discussed this past year and it is hoped that equally good programs will be planned for the coming year.

LORETTA T. SCHULER, Territorial Nurses' Association Representative to Oahu Health Council

RESIGNATION

It is with deep regret that announcement of Mrs. Laura Wright's resignation as Association secretary and return to the mainland is made. She and her husband will reside in San Jose, California during the time he is taking special courses at the college. They left the Islands on October 30.

Too high praise cannot be given Mrs. Wright for her cheerful, efficient handling of the Association secretarial work, her warm interest and devotion to duty which was evident during her entire stay with us. She will be keenly missed by her many friends.

NURSES' ASSOCIATION, COUNTY OF HAWAII

The death of Miss Stella S. Mathews, Red Cross Nurse, in Berkeley, California, August 13, 1949, marks the passing of a woman whose long life was dedicated to the service of humanity.

Miss Mathews was born in Breckenridge, Minnesota, 81 years ago. She was a graduate of Columbia Hospital School of Nursing in Milwaukee in 1909, and was superintendent of Milwaukee Children's Hospital for several years. She was the first president of the Wisconsin State Nurses' Association.

When the United States entered World War I, she organized the nurses' unit of Base Hospital No. 22 in Milwaukee, and led the group of 100 nurses to Europe, where they were stationed at Beau Desert, Gironda, France.

From 1920 to 1921, she was with the Red Cross in Poland where she organized the first nurses' training school. She was in charge of the nurses attached to the Warsaw Typhus Fever Research Hospital at the time that scourge threatened to sweep all Central Europe. For her work she was decorated by the Polish Red Cross.

In 1922 she was assigned as chief nurse for the refugee relief expedition to Greece, after 100,000 refugees, driven out of Smyrna by the Turks, had taken shelter there. For her work in Greece Miss Mathews was made a Chevalier of the Royal Order of George I.

The International Red Cross awarded her the Florence Nightingale Medal in 1939 at Geneva, Switzerland, for outstanding work with the U. S. Army and the Red Cross in Europe.

Miss Mathews came to Honolulu in 1923 as director of the Red Cross Nursing Service for the Islands. She came to Hilo to be superintendent of Hilo Memorial Hospital in February 1926, and resigned in 1928 to become director of Nursing Service in Palama Settlement in Honolulu.

She retired in 1934, but returned to the service later to organize and direct an official registry and nursing service bureau for the Territorial Nurses' Association.

In Hilo, besides serving as head of an expanding hospital, she organized the County Nurses' Association, now affiliated with the Territorial and National Nurses' Associations.

Miss Mathews instituted the first observance of National Hospital Day in Hilo, May 12, 1927, commemorating the birthday of Florence Nightingale. Each guest at the hospital was given a booklet of the hospital's history, written by Miss Mathews.

She was prominent in the Woman's Club, First Foreign Church and the American Legion Auxiliary. Since 1941 she had been living in Berkeley with her sister, Sarah, a former teacher in Honolulu and Hilo.

MARGARET E. CAMPBELL, R.N. A Charter Member of Nurses' Association, County of Hawaii

MAUI NURSES' ASSOCIATION

Kula Sanatorium:

MISS BARBARA ELROD has returned to her home in San Lorenzo, California. MISS IONA RICKEY is back at work at Kula after vacationing in Portland, Oregon, as is MISS CHARLOTTE RINGROSE who vacationed at her home in Nelson, British Columbia. MISS BEVERLY WARNER, graduate of St. Mary's Hospital, San Francisco, has recently joined the staff.

Malulani Hospital:

MRS. CLAIRE NAGAMINE and MISS MASAI TAIRA vacationed in Honolulu. MISS MILDRED KOHATSU, previously at Malulani, has completed post-graduate studies in obstetrics in New York City and is returning to work at Hilo Memorial Hospital. MRS. NINA WILSON has returned to work after maternity leave, and MRS. TRINIDAD is back at work after several weeks' illness.

Public Health Department:

Miss Fumiye Suzuki, recent graduate of the University of Hawaii Public Health Course has been assigned to Lahaina district. Miss Hazel Kanemoto of Honolulu will work in the Kula district and Miss Okune Tanner in the Haiku district. Miss Mildred Mante has been transferred to Honolulu.

Puunene Hospital:

Miss Estelle Mahan has left for her home in Modesto, California. Miss Rose Litel vacationed at her home in Minneapolis, Minnesota. Miss Betty Onsrud and Miss Beverly Haugens, both from Minneapolis, are new staff members. They were previously at Hana Hospital. Miss Claiborne Von, University of Virginia Hospital, is also a new staff member. Miss Marilyn Estill is vacationing in Seattle, Washington and Watsonville, California. Miss Arlene Agifu and Miss Viona Suzuki, new graduates of Kuakini Hospital, are now employed at Puunene.

After four months in New York City, Miss Eileen MacHenry has returned to Maui where she is working at the Haliimaile Dispensary.

Miss Dorothy Gray who has been doing private duty nursing on Maui is now working at Kona Hospital, Hawaii.

Marilyn Estill, R.N., *Reporter*

OUR BULLETIN

It seems to me that a word of appreciation to Violet Buchanan, our Inter-Island Nurses' Bulletin editor, is overdue. She has been editing the Bulletin in a most capable way without, I am sorry to say, very consistent help from the rest of us. She has had to prod people into submitting material, follow up on them when they failed to send it in, and often has had to pick out of thin air something—anything, in order to meet the deadline and get out an issue.

This is not the kind of Bulletin which she enjoys editing nor the kind she feels represents the best interest of nurses in Hawaii.

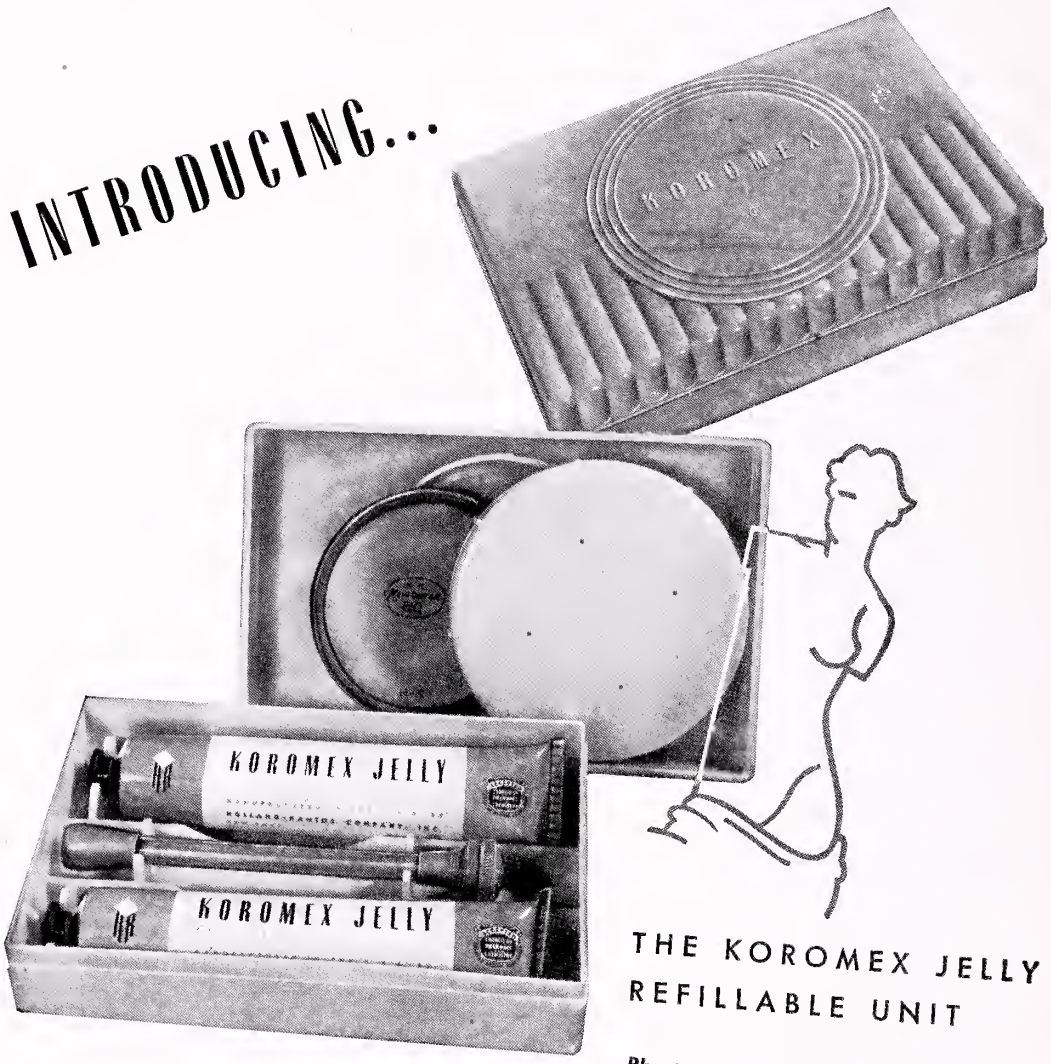
We have asked Miss Buchanan to serve as editor again this year and we are planning to give her more help so she will be able to make the Bulletin the dynamic publication she has been striving for.

To secure broader coverage, we are including in the membership of the Information Committee nurses whose responsibility it will be to channel information from all fields of nursing to Miss Buchanan.

We hope, in addition, that each member of our Association will consider it her personal responsibility to send in material which is suitable for Bulletin publication. All contributions and suggestions may be left at the association office in the Mabel Smyth building.

—Virginia A. Jones, *President*

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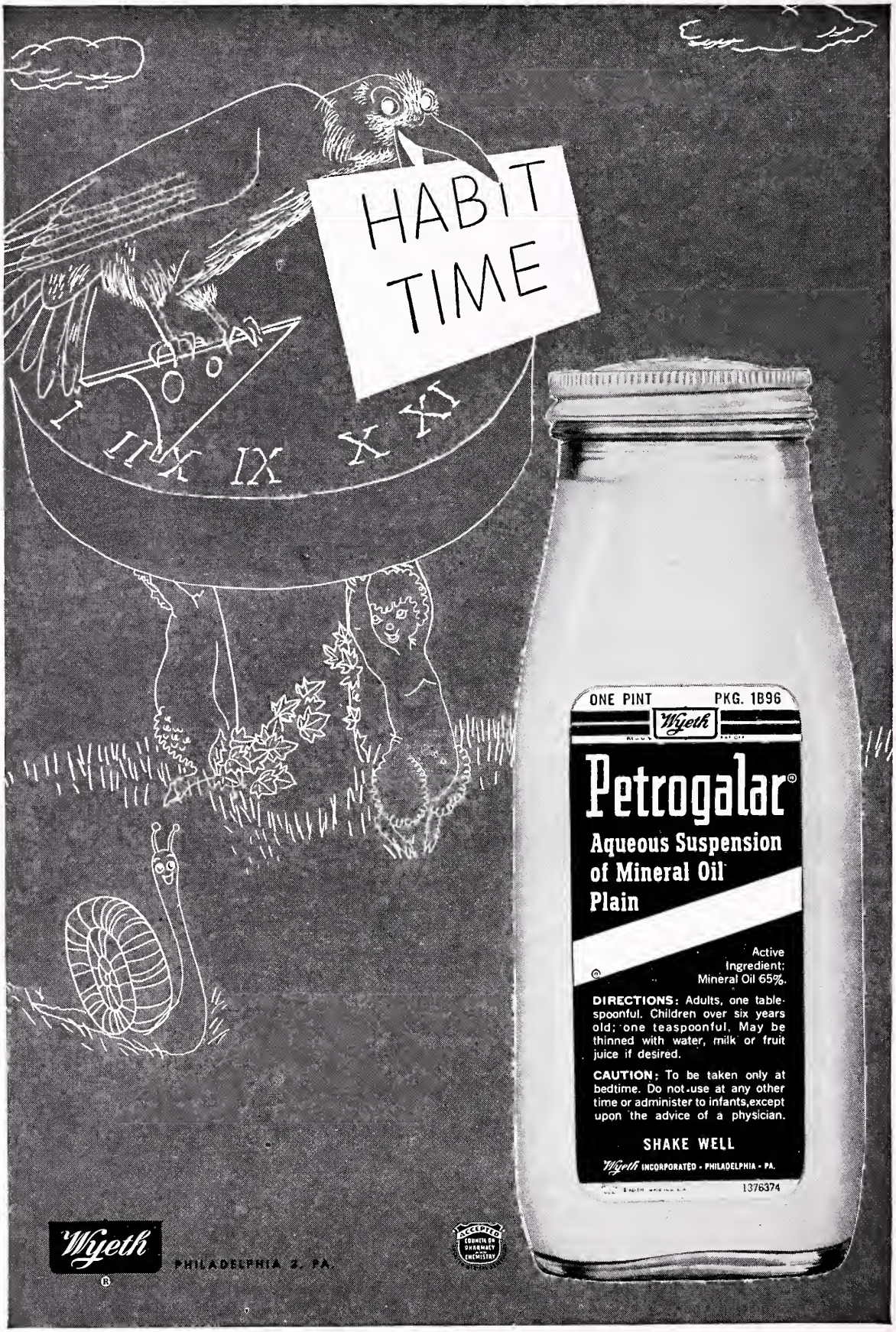
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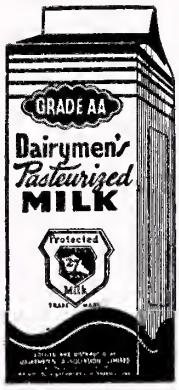
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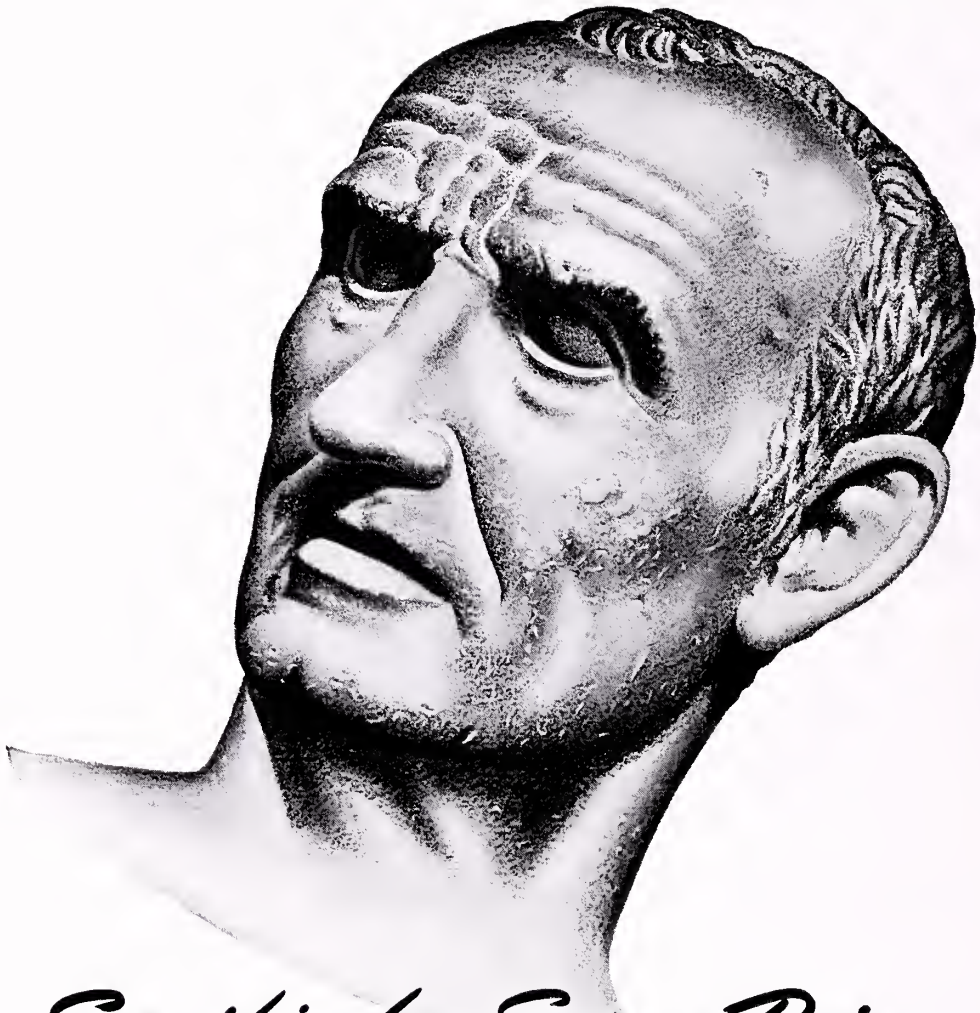




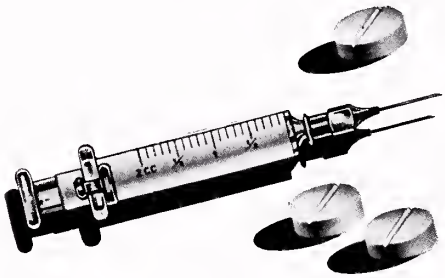
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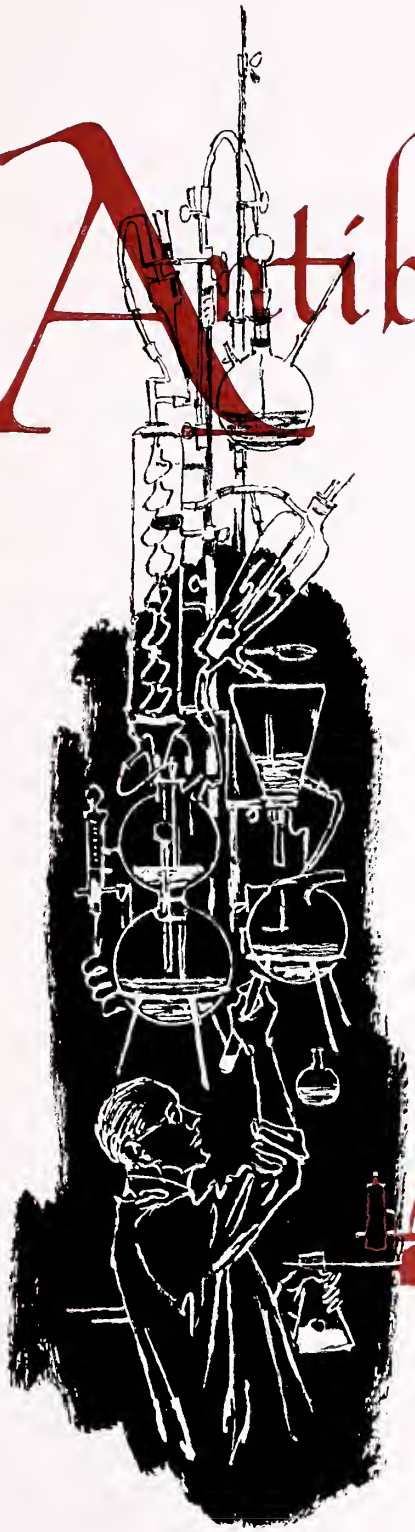
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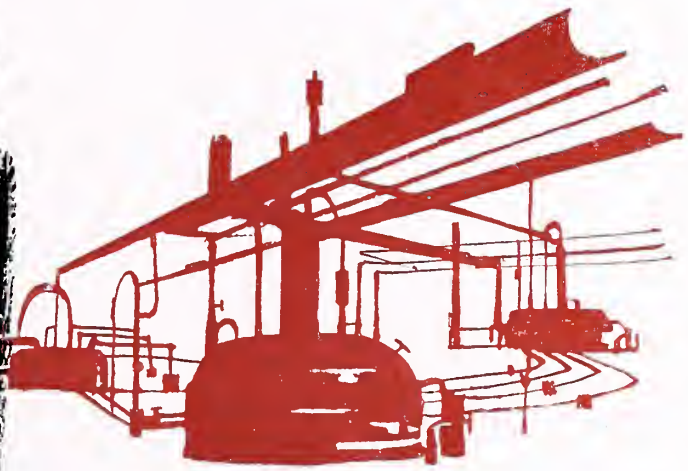
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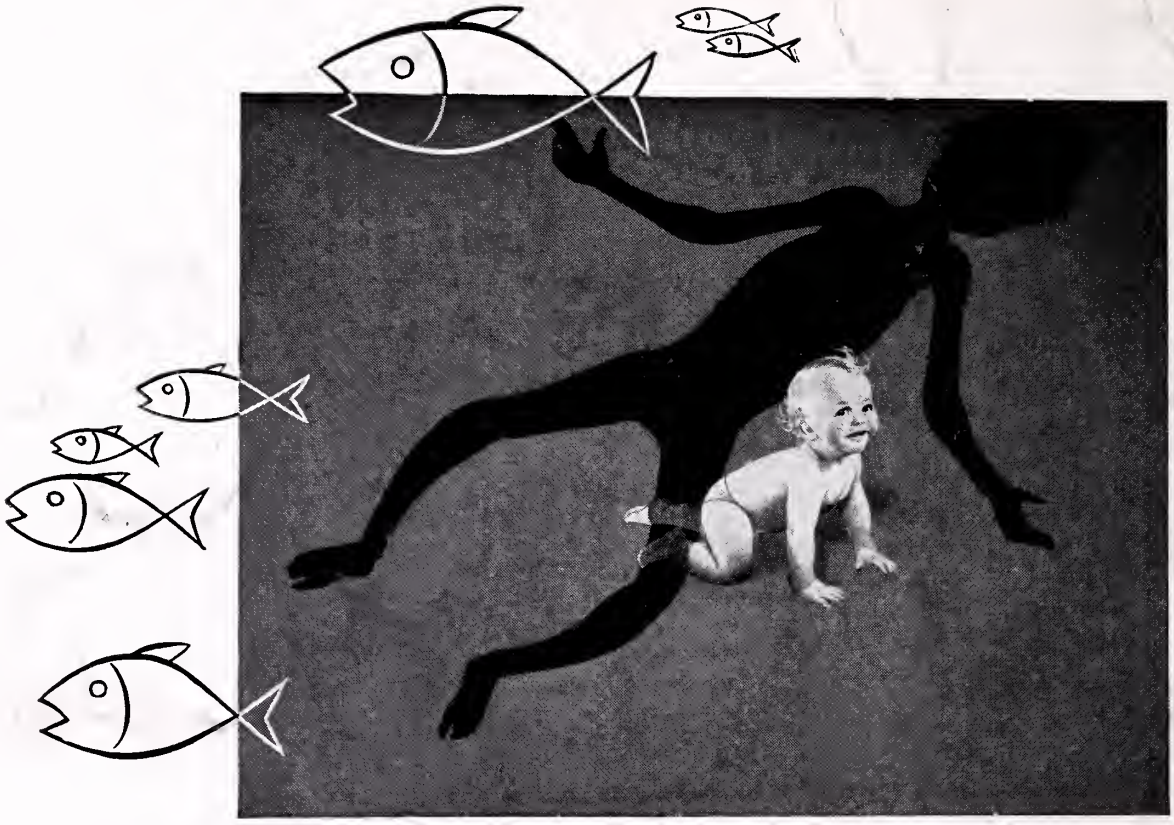
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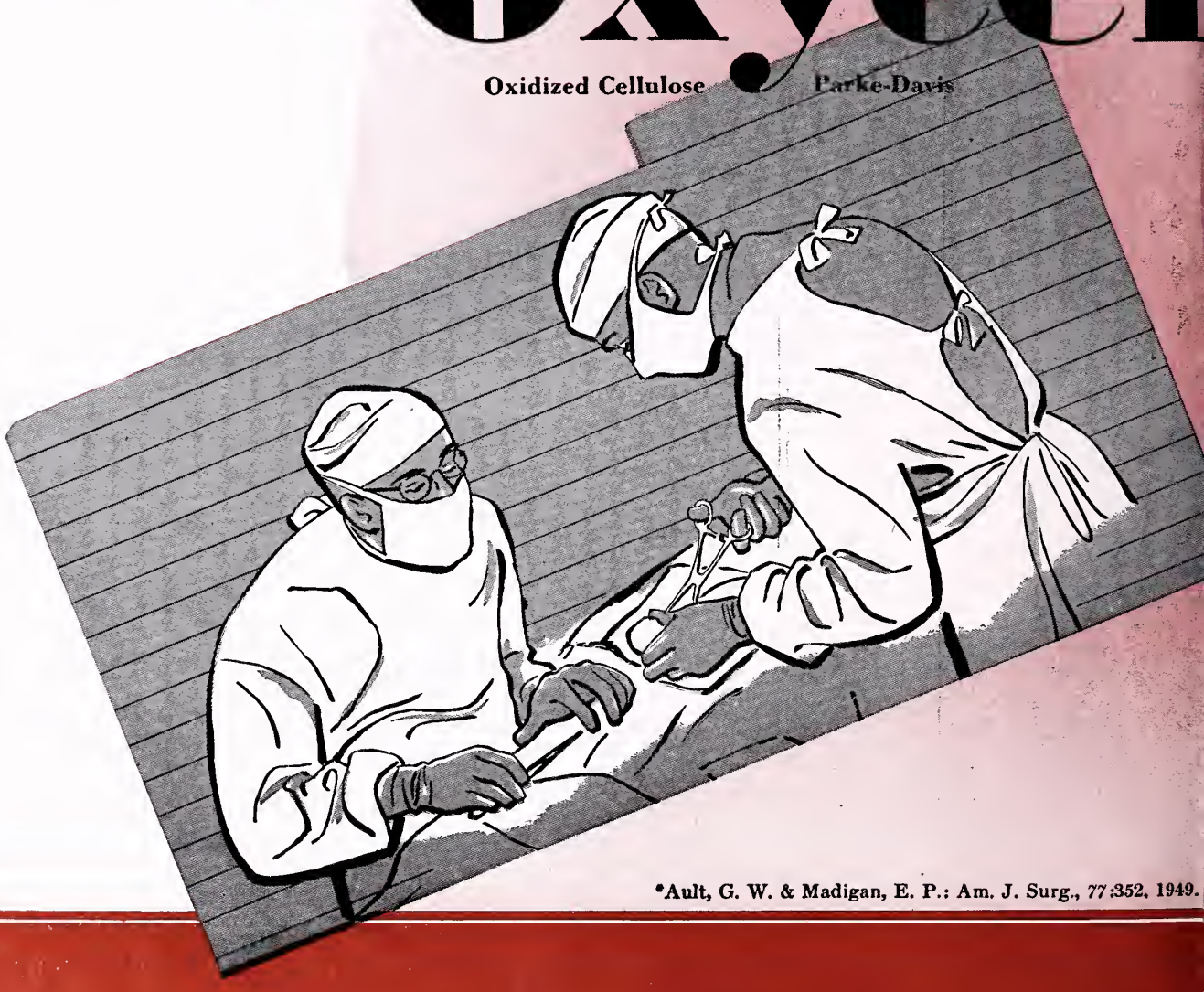
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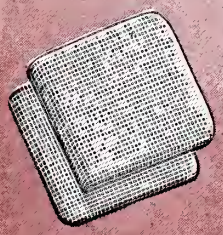
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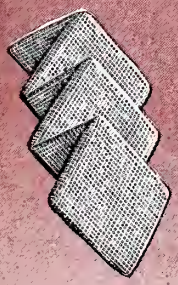
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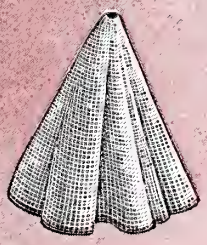
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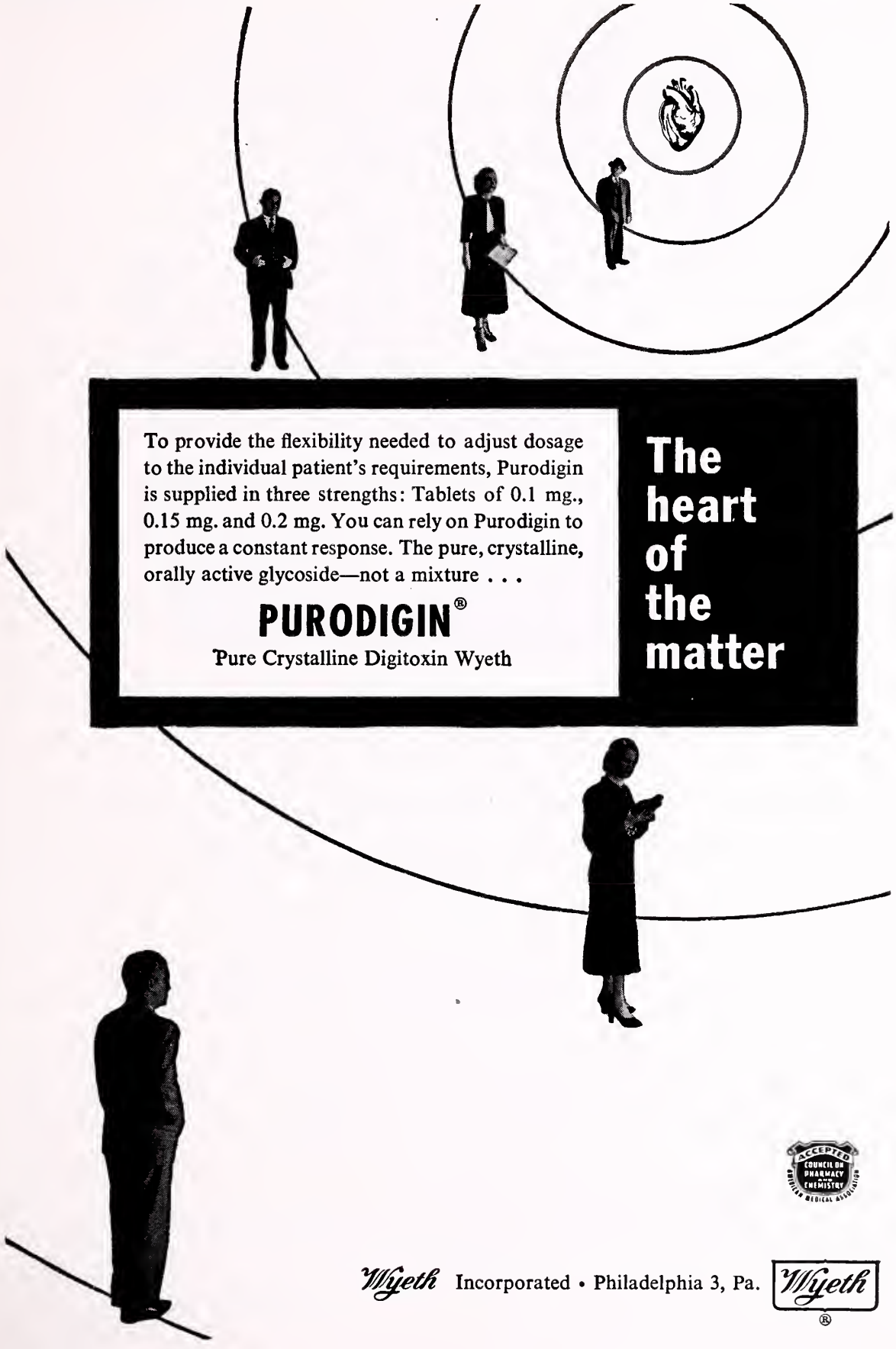
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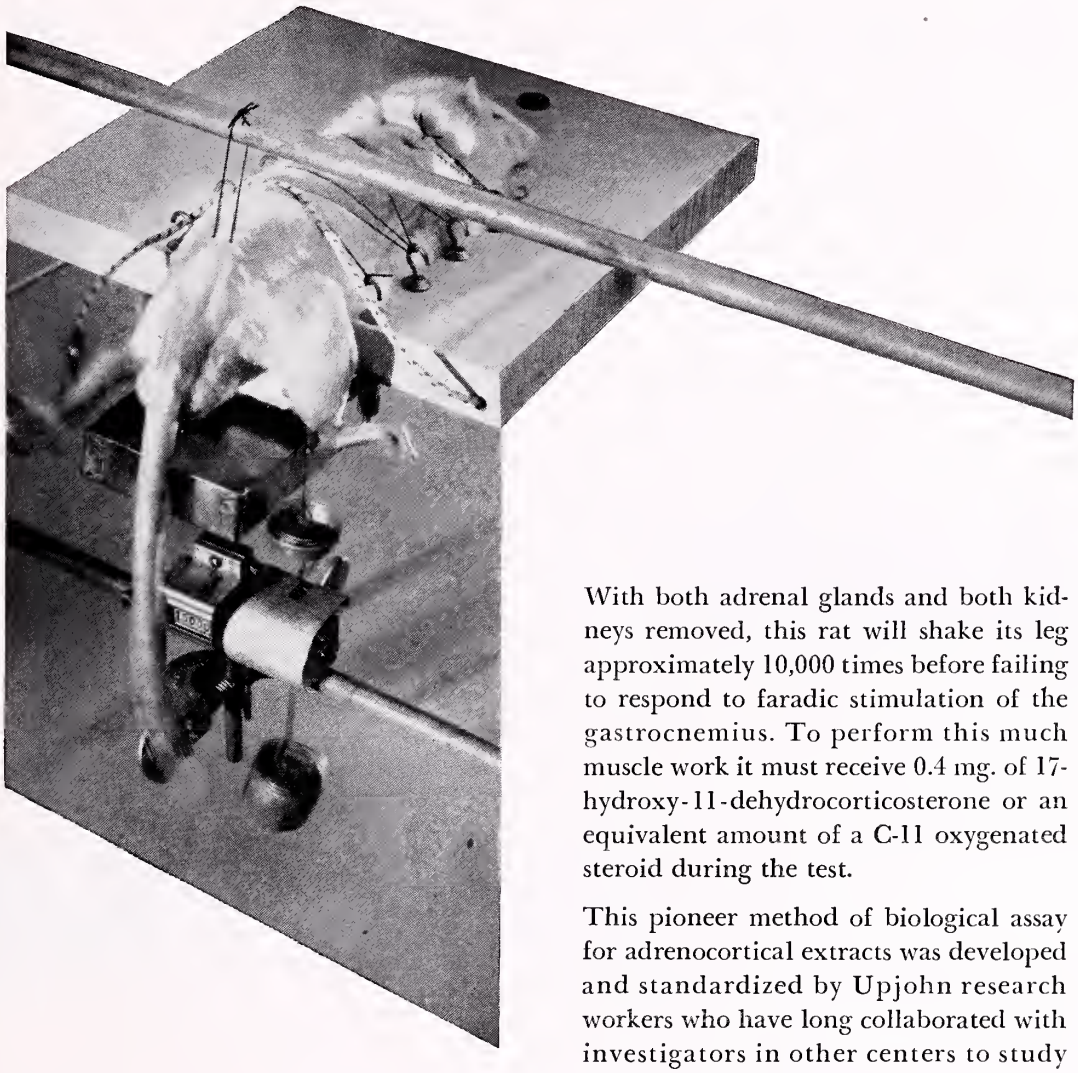
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Observations on Salmonellosis in the Hawaiian Islands

MAX LEVINE, Ph.D., JAMES R. ENRIGHT, M.D.
GEORGE CHING, AND RALPH TANIMOTO
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STUDIES on the bacterial enteric pathogens clearly demonstrate that they are not confined to the familiar typhoid, paratyphoid A and paratyphoid B, but constitute a large group of closely related forms, many of which have previously gone unrecognized as etiologic agents in enteric disturbances of both man and animals. Thanks to the development of antigenic analysis, almost 200 varieties or types of Salmonella are now distinguishable. A goodly number are pathogenic for animals and several for man only. Many others, however, are inter-transmissible between animals and man and not infrequently are associated with human cases of food poisoning.

In 1936, Staff and Grover[1] reported an outbreak of 208 cases of food poisoning with 3 deaths in which rats had apparently contaminated cooked cream filling for bakery products.

Bartram, Welch and Ostrolenk,[2] in 1940, demonstrated that rats fed on Salmonella enteritidis (an organism known to be pathogenic for humans) may become carriers for at least seven weeks after infection and that this carrier state, as is also the case in man, may manifest itself intermittently; but they were unable to detect the organisms in the dejecta of 800 domestic rats. In a later communication (1941)[3] these authors observed that excreta from naturally infected rats may contain living S. enteritidis for at least one hundred forty-eight days when kept at room temperature. The potentiality of rats and mice as infective agents of outbreaks of food poisoning is evident. Although these authors found only 1.2 per cent, in a large number of animals examined, to be excreting organisms of the Salmonella group, they pointed out that these rodents must be considered potentially dangerous and every effort should be made to eliminate them from establishments where human food is prepared or stored.

Seligman,[4] in 1943, reported eight outbreaks of food poisoning associated with Salmonella typhimurium and that this organism was the causative agent in three outbreaks in pediatric wards and two in general wards in a hospital, and recommended that the personnel in food establishments, public eating places, and particularly hospital kitchens and dairies, be checked regularly for the presence of enteric bacterial pathogens.

Watt and Carlton,[5] in 1945, reported an outbreak of S. typhimurium infection among newborn premature infants, which was spread from a child, presumably infected at birth, to 4 children in adjacent bassinets and 1 in a nearby bassinet. Examination of expectant mothers as a precautionary measure was suggested.

Wolff (1947 and 1948)[6] discusses the public health significance of animal salmonellosis, calling attention to the fact that since many of the Salmonella encountered in dogs have proven to be pathogenic for man, that the dog should be considered a potential source of human infection. Meyer, in 1948,[7] also calls attention to the animal kingdom as a reservoir for Salmonella infection in man.

Salmonellosis in Hawaii

In 1942, shortly after the outbreak of World War II, TAB vaccination of the population (over 3 years of age) of Hawaii was ordered by the Military Governor as one of the safety measures against enteric infections. Today Hawaii is in a unique position in this respect, in that a very large proportion (perhaps over 95 per cent) of its population over 3 years of age has the advantage of at least one round of TAB vaccination. Furthermore, in view of the relative stability of the native population, and the fact that new settlers are often former military personnel, it was felt that a study of age distribution of the various types of Salmonella might throw light on the rela-

From the Bureaus of Laboratories and Epidemiology, Territorial Department of Health, Honolulu, Hawaii.
Received for publication November 1, 1949.

[1] Staff, E. J., and Grover, M. L.: An Outbreak of Salmonella Food Infection Caused by Filled Bakery Products, Food Res. 1:5 (Sept.-Oct.) 1936.

[2] Bartram, M. T., Welch, H., and Ostrolenk, M.: Incidence of Members of the Salmonella Group in Rats, Jour. Inf. Dis. 7:222 (Nov.-Dec.) 1940.

[3] Welch, H., Ostrolenk, M., and Bartram, M. T.: Role of Rats in the Spread of Food Poisoning Bacteria of the Salmonella Group, Am. J. Pub. Health 31:332 (April) 1941.

[4] Seligman, M.: Salmonella Infections in Man, Am. Jour. Hyg. 38:226 (Nov.) 1943.

[5] Watt, J., and Carlton, E.: An Outbreak of Salmonella typhimurium Infection Among Newborn Premature Infants, Pub. Health Rep. 50:734 (June 29) 1945.

[6] Wolff, H.: The Public Health Significance of Animal Salmonella Infections, Jour. Am. Vet. Med. Assoc. 111:474 (Dec.) 1947. Wolff, H., Henderson, N. D., and McCallum, G. L.: Salmonella in Dogs and the Possible Relationship to Salmonella in Man, Am. Jour. Pub. Health 38:403 (Mar.) 1948.

[7] Meyer, K. F.: The Animal Kingdom, A Reservoir of Human Diseases, Ann. Int. Med. 29:326 (Aug.) 1948.

tion of previous history (as respects TAB vaccination) to the incidence of various types of Salmonella encountered in cases and asymptomatic carriers, and whether there might be some relation between Salmonella food poisoning and animal reservoirs.

Source of Specimens

Although infections due to Salmonella (other than typhoid, paratyphoid A and B) are not reportable, the Health Department is advised from time to time of the existence of such infections, as there is a close liaison with the local hospitals. Fecal specimens available to the Bureau of Laboratories fall into the following categories: (1) those submitted, as required by law, from individuals who handle dairy products or who desire to visit, or must work on, the watersheds; (2) hospitalized cases which are suspected of harboring Salmonella; and (3) epidemiologic follow-up of either hospitalized cases or outbreaks of food-poisoning which come to the attention of the Department of Health.

It is the standard practice (when a stool or other specimen submitted from any source is found to contain a member of the Salmonella group) for the Bureau of Epidemiology to obtain stool specimens from as many contacts of the case as possible, and if a particular restaurant is suspected its employees are examined. This practice, which was instituted as a routine about a year and a half ago, has served to bring to light many previously unrecognized or missed cases and carriers.

Technique for Isolation of Salmonella

In general, stool specimens are brought to the laboratory by the investigator of the Bureau of Epidemiology within two hours after collection. These are immediately plated directly onto S.S. agar and portions placed into selenite and tetrathionate enrichment media from which inoculations are made onto S.S. agar after twenty-four hours' incubation at 37 C.

Suspicious colonies on S.S. agar (at least four were taken from each direct and preliminary enrichment plate, where possible) were fished to Kligler's Iron Agar. If reactions characteristic of Salmonella or Shigella were observed on Kligler's medium, rapid micro tests for urea splitting properties were carried out and, if found to be negative, the respective cultures were considered as possibly members of the Salmonella-Shigella groups and further identified by physiological and serological reactions.

Suspicious cultures were inoculated into mannitol, lactose, sucrose, and salicin broths for acid and gas production; tryptophane broth for determination of indol production; and semi-solid agar for detection of mo-

TABLE 1.—*Incidence of Salmonella in Hawaii by Type, Source, and Severity of Symptoms.*

SALMONELLA Group	SALMONELLA Type	SOURCE: REPORTED (HOSPITALIZED) CASES	EPIDEMIOLOGICAL FOLLOW UP: *Missed Cases*	EPIDEMIOLOGICAL FOLLOW UP: *Asymptomatic Carriers*	OTHERS	TOTAL: *No.*	TOTAL: *Per Cent*	TOTAL (%) IN GROUP
		Number of Individuals						
A	paratyphi (A)	1	—	—	—	1	(0.4)	1 (0.4)
B	paratyphi (B)	—	—	1	—	1	(0.4)	43 (15.6)
	derby	5	2	2	4	13	(4.7)	
	typhimurium	14	1	5	—	20	(7.3)	
	bredeney	—	—	1	—	1	(0.3)	
	undetermined	4	—	3	1	8	(2.9)	
C	montevideo	26	47	97	1	171	(62.0)	191 (69.4)
	newport	2	—	2	—	4	(1.5)	
	oranienburg	10	1	—	—	11	(4.0)	
	oslo	—	—	1	—	1	(0.4)	
	manhattan	1	—	—	—	1	(0.4)	
	undetermined	2	—	1	—	3	(1.1)	
D	enteritidis	2	—	1	—	3	(1.1)	10 (3.6)
	panama	3	—	2	—	5	(1.8)	
	undetermined	2	—	—	—	2	(0.7)	
E	anatum	7	2	4	2	15	(5.5)	20 (7.3)
	give	1	—	1	—	2	(0.7)	
	melagrides*	—	1	—	—	1	(0.4)	
	undetermined	—	—	1	1	2	(0.7)	
F	adelaide*	—	—	—	2	2	(0.7)	10 (3.7)
	carrau*	—	—	—	1	1	(0.4)	
	grumpensis	4	—	3	—	7	(2.5)	
	TOTAL	84	54	125	12	275	(100)	275
	Per cent	(30.5)	(19.6)	(45.5)	(4.4)			

* From Christmas Island.

tility. Although failure to conform in one of these reactions was not considered sufficient to discard the organism as a possible Salmonella, disagreement in several reactions or production of an off odor was practically assurance of subsequent failure to allocate the strain to the Salmonella group. In view of the paucity of suitable sera these physiologic reactions frequently served to conserve specific antisera which were not readily procurable.

In cases where speedy tentative diagnosis was requested or desired, preliminary slide agglutination tests were made with polyvalent Salmonella antisera directly from suspicious Kligler's agar slant growths. Though we recognized the utility of this procedure, it was not generally employed because of the necessity for conserving polyvalent sera in this isolated area. Furthermore, it was recognized that a positive agglutination was not necessarily a dependable criterion that the organism was a member of the Salmonella group in view of the fact that a goodly number of members of the coliform group had been encountered which had antigenic components in common with the Salmonella. All cultures were therefore studied biochemically as well as serologically.

Allocations of suspected strains to various sub-groups of the Salmonella were made at the laboratory of the Department of Health and the specific types were ascertained through the assistance of an Army laboratory which graciously extended its facilities to us and, from time to time, several cultures were sent to Drs. Edwards and Bruner for verification.

Distribution of Salmonella Types Among Cases and Carriers

During the period July 1, 1947, to December 31, 1948, there were isolated 275 strains of Salmonella from 273 individuals. Four of these, one S. melagrides, two S. adelaide, and one S. carrau, were from specimens submitted from foodhandlers on Christmas Island and will not be considered further. The distribution of these Salmonella strains with respect to origin and type[8] of Salmonella encountered is shown in detail on Table 1. Among the 275 strains isolated there were 84 from hospitalized cases; 179 (of which 54 were definitely ill and therefore constituted missed cases, and 125 were asymptomatic carriers) were detected as a result of the epidemiological follow-up, and in 12 instances organisms were encountered in stools submitted by people desiring to go on to the restricted watersheds or engage in the handling of dairy products. It is worthy of note that more than twice as many Salmonella were detected as a result of epidemiologic follow-up as were encountered as hospitalized cases, and that if it had not been for the liaison between the Health Department and the hospitals only one of the 273 individuals involved would have come to the attention of the Health Department—namely, the case of S. paratyphi A.

[8] Type determination was not initiated until after the arrival of the senior author on the islands. Specific types of 13 strains encountered before October 1, 1947, were not ascertained though their Salmonella sub-groups were determined.

It is further apparent from Table 1 that the frequency of the various types of Salmonella encountered were in the following order: S. montevideo (62 per cent), S. typhimurium (7.3 per cent), S. anatum (5.5 per cent), S. derby (4.7 per cent), and S. oranienburg (4.0 per cent), the various other types being only occasionally encountered.

In Table 2 the data presented in Table 1 are summarized for more convenient reference. There it will be noted that Salmonella strains of groups A, B, and D, against which a very large proportion of the adult population had been immunized at one time or another, accounted for only 54 or 19.7 per cent of the isolations. It will be shown later that a large proportion of these were among non-vaccinated children under 3 years of age.

The relative frequency of the various groups of Salmonella were as follows: group C, 69.2 per cent; group B, 15.6 per cent; group E, 7.3 per cent; group D, 3.7 per cent, group F, 3.7 per cent; group A, 0.4 per cent.

S. paratyphi A was encountered in only one case; S. paratyphi B was also encountered in a single instance and that was in an adult carrier.

TABLE 2.—*Incidence of Various Groups of Salmonella in Hawaii by Source and Severity of Symptoms.*

SOURCES / Salmonella Group	HOSP. CASES	EPIDEMIOLOGICAL FOLLOW-UP: *Missed Cases*	EPIDEMIOLOGICAL FOLLOW-UP: *Asymp. Carriers*	OTHER SOURCES	TOTAL: *No.*	TOTAL: *Per Cent*
	Number of Isolates					
A	1	—	—	—	1	0.4
B	23	3	12	5	43	15.6
D	7	—	3	—	10	3.7
Sub Total	(31)	(3)	(15)	(5)	(54)	(19.7)
C	41	48	101	1	191	69.2
E	8	3	6	3	20	7.4
F	4	—	3	3	10	3.7
Sub Total	(53)	(51)	(110)	(7)	(221)	(80.3)
TOTAL	84	54	125	12	275	
Per Cent	30.5	19.6	45.5	4.4	100	100

The Relation of Age to Incidence of Salmonella

It is established pediatric practice in Hawaii to inoculate children at the age of 3 years with TAB vaccine. As has already been stated, all of the population over 3 years of age were immunized in 1942, and until termination of the war booster shots were required annually. Although the booster shot requirement has not been enforced, it should be borne in mind that a very large proportion, perhaps 95 per cent, of the population over 3 years of age, have at one time or another been vaccinated with TAB.

TABLE 3.—*Incidence of Salmonella in Hawaii by Type, Severity of Symptoms and Age of Individuals Affected (July 1947 to Dec. 31, 1948).*

Group	Type	LESS THAN 6 MOS.	6 MOS.-1 YR.	1-3 YRS.	3-10 YRS.	10-20 YRS.	20 YRS. AND OVER	TOTAL H.C.	TOTAL (M.C.)	TOTAL Carr.	GRAND TOTAL
		Number of Individuals (Salmonella)									
A	Paratyphi A						1 — —	1			1
B	Paratyphi B						— — 1			1	1
	derby		2 — —		— — 1	— — 1	3(2) 4	5	(2)	6	13
	typhimurium	4 — —	6 — —	3(1)—			1 — 5	14	(1)	5	20
	bredeney						— — 1			1	1
	undetermined	2 — —		1 — 1			1 — 3	4		4	8
C	montevideo	1 — —	4 — —	1 — —	1 — 2	—(1)3	19(46) 93	26	(47)	98	171
	newport	1 — —		1 — —			— — 2	2		2	4
	oranienburg			1 — —	1 — 1		8 — —	10		1	11
	oslo						— — 1			1	1
	manhattan		1 — —					1			1
	undetermined				— — 1		2 — —	2		1	3
D	enteritidis			2 — —	— — 1			2		1	3
	panama		2 — —				1 — 2	3		2	5
	undetermined	1 — —					1 — —	2			2
E	anatum	1 — —	2 — —				4(2) 6	7	(2)	6	15
	give	1 — —			— — 1			1		1	2
	melagrides*						—(1) —		(1)		1
	undetermined				— — 1		— — 1			2	2
F	adelaide*						— — 2			2	2
	carrau*						— — 1			1	1
	grumpensis	1 — —	1 — —	— — 1			2 — 2	4		3	7
TOTAL		13 — —	19 — —	7(1)2	2 — 7	—(1)4	43(52)124	84	(54)	137	275

* From individuals on Christmas Island (survey).
Hospitalized cases—*H.C.*; figures in **bold face**. Missed cases—(M.C.); figures in ( ). Asymptomatic carriers—Carr.; figures plain.

The distribution of various types of Salmonella encountered is shown in Table 3 with respect to age and whether the isolates were from hospitalized cases, missed cases, or asymptomatic carriers.

It will be noted from Table 3 that whereas S. typhimurium constituted the most important type of Salmonella (35 per cent of 40 cases among children under 3 years of age) with S. montevideo next in frequency (with 6 or 12.5 per cent of cases). The incidence of cases as well as carriers was strikingly different among individuals over 3 years of age. S. montevideo far outstripped all the other varieties combined, constituting approximately 58 per cent of the hospitalized cases; 89 per cent of the missed cases, and 72 per cent of the strains isolated from carriers—and 74 per cent of the Salmonella encountered in this vaccinated age group.

TABLE 4.—*Incidence of Various Groups of Salmonella in Hawaii by Age and Severity of Symptoms.*

AGE	UNDER 3 YEARS				OVER 3 YEARS			
Salmonella Group	*Hosp. Cases*	*Missed Cases*	*Asymp. Carr.*	*Total*	*Hosp. ases*	*Missed Cases*	*Asymp. Carr.*	*Total*
	Number of Isolates							
A	—	—	—	—	1	—	—	1
B	18	1	1	20	5	2	16	23
D	5	—	—	5	2	—	3	5
C	10	—	—	10	31	47	103	181
E	4	—	—	4	4	4	8	16
F	2	—	1	3	2	—	5	7
TOTAL	39	1	2	42	45	53	135	233
% (A+B+D)	59	—	2	60	18	4	14	12

The incidence of the various groups of Salmonella by age and severity of symptoms is summarized in Table 4. Of 42 isolations from unvaccinated children under 3 years of age, 39 (93 per cent) were among hospitalized cases and only 1 missed case was encountered. This is in marked contrast to individuals over 3 years of age (very few cases were encountered among those between 3 and 20 years of age), among whom only 2 hospitalized cases, 1 missed case, and 11 carriers were encountered where, of 233 isolations, 45 (19.3 per cent) were hospitalized cases: 53 (22.7 per cent) were missed cases, and 135 (58 per cent) from asymptomatic carriers.

It is particularly significant that among 40 hospitalized and missed cases of children under 3 years of age, 24 or 60 per cent were due to Salmonella of groups A, B, and D, which have antigenic components in common with those in the TAB vaccine; whereas among 98 hospitalized and missed cases in individuals over 3 years of age, and presumably vaccinated, only 10 (10 per cent) of the isolations were Salmonella types falling into groups A, B, and D. The results therefore suggest correlation between previous vaccination and Salmonella type susceptibility.

This is further illustrated from the data summarized in Table 5, where the relation of age and

presumed vaccination with TAB is correlated with the incidence of various Salmonella groups, and in which all of the isolates irrespective of severity of symptoms are presented. Here it will be noted that of 42 infections in children under 3 years of age (none of whom had been previously vaccinated with TAB) 25, or approximately 60 per cent, were due to Salmonella of groups A, B, and D, and that almost all of these (23, or 92 per cent) were hospitalized. In contrast to this, of the 233 isolations from individuals over 3 years of age (probably 95 per cent vaccinated) Salmonella strains which fell into groups A, B, and D were encountered in only 29 instances (or 12.5 per cent of isolations) and, of these, only 8 individuals, or 27 per cent, were ill enough to be hospitalized.

TABLE 5.—*Relation of Age (and Presumed Vaccination with TAB to Salmonella Groups Detected in Hawaii.*

SALMONELLA GROUPS		UNDER 3 YEARS	OVER 3 YEARS*	TOTAL
	A+B+D	25†	29‡	54
	C+E+F	17	204	221
TOTAL		42	233	275
% (A+B+D)		60	12.4	19.6

* Over 95% previously vaccinated with TAB.
† 23 (92%) hospitalized.
‡ 8 (27%) hospitalized.

Whether this difference in incidence in Salmonella infections due to groups A, B, and D among children under 3 years of age, as compared to older individuals (primarily over 20 years of age) is due to the greater virulence of these organisms for young children or residual resistance of older individuals because of their previous vaccination with TAB cannot, of course, be asserted with assurance, but the results are intriguing and suggestive of a possible relation between previous vaccination and resistance to infection with Salmonella of groups A, B, and D; and they pose the question as to whether the present practice of immunizing children at the age of 3 years should not be modified to the extent of advancing the age to an earlier date, if universal TAB vaccination is to be practiced.

Considering the incidence of the various Salmonella of group B, it will be noted from Table 6

TABLE 6.—*Incidence of Salmonella Group B in Hawaii by Type, Age and Severity of Symptoms.*

	UNDER 3 YEARS			OVER 3 YEARS				
Salmonella Type	*Hosp. Cases*	*Missed Cases*	*Asymp. Carr.*	*Hosp. Cases*	*Missed Cases*	*Asymp. Carr.*	TOTAL	PER CENT
S. paratyphi B	—	—	—	—	—	1	1	2.3
S. derby	2	—	—	3	2	6	13	30.3
S. typhimurium	13	1	—	1	—	5	20	46.5
S. bredeney	—	—	—	—	—	1	1	2.3
Undetermined	3	—	1	1	—	3	8	18.6
TOTAL	18	1	1	5	2	16	43	100.0

that of 43 isolates which fall into this category 20 (47 per cent) were S. typhimurium and 13 (30 per cent) S. derby. Of the latter only 2 were among children under 3 years of age, whereas 5 were from hospitalized and missed cases in adults and 6 were from asymptomatic adult carriers.

In contrast to this, cases of S. typhimurium were found almost exclusively among unvaccinated children under 3 years of age. Thus, of 20 isolates of S. typhimurium only 1 was from a hospitalized case of an adult (over 20 years of age) whereas 13 were among hospitalized cases and 1 in a missed case in children under 3 years of age.[9] It is especially worthy of note that of the 5 adult asymptomatic carriers of S. typhimurium, 4 (3 of them parents) were in direct contact with hospitalized children.

The relative incidence of various types of Salmonella in group C is of considerable interest and strikingly indicated in Table 7. Among 191 strains which fell in this group 171 (89.5 per cent) were S. montevideo. Among these were 6 hospitalized cases of children under 3 years of age, 20 hospitalized, and 47 missed cases among individuals over 3 years old (of which only 1 hospitalized and 1 missed case were under 20 years of age) and 98 asymptomatic carriers of which 5 were in individuals under 20 years of age.

TABLE 7.—*Incidence of Salmonella Group C by Type, Age and Severity of Symptoms.*

	UNDER 3 YEARS			OVER 3 YEARS				
Salmonella Type	*Hosp. Cases*	*Missed Cases*	*Asymp. Carr.*	*Hosp. Cases*	*Missed Cases*	*Asymp. Carr.*	TOTAL	PER CENT
S. montevideo	6	—	—	20	47	98	171	89.5
S. newport	2	—	—	—	—	2	4	2.1
S. oranienburg	1	—	—	9	—	1	11	5.8
S. oslo	—	—	—	—	—	1	1	0.5
S. manhattan	1	—	—	—	—	—	1	0.5
Undetermined	—	—	—	2	—	1	3	1.6
TOTAL	10	—	—	31	47	103	191	100.0

S. oranienburg was encountered in 11 instances (58 per cent) and it is interesting to note that 8 of these were on the island of Molokai and 3 on the island of Kauai, but that this type was not encountered on the island of Oahu, upon which Honolulu is situated.

The source of S. montevideo, which evidently is the predominating type, is therefore of considerable interest. The experience in Hawaii during a period of a year and a half indicates that this organism was implicated in five definite outbreaks of food poisoning, three of which were associated with one restaurant. This organism has been en-

[9] In contrast to this, Dr. Feemster stated that in Massachusetts, where universal TAB vaccination is not practiced, there was no relation between age and incidence of Salmonella typhimurium infection.

countered in rodents, dogs and dried eggs in Hawaii. That this organism is capable of frequently causing very severe disease symptoms with evidence of invasion of the body proper was convincingly demonstrated by our experiences in Honolulu. A brief description of two outbreaks may illustrate the basis for our opinion on some of the problems involved, as well as the variability of susceptibility to infection.

In one of these outbreaks, one of the sanitary inspectors of the Department of Health, who had partaken of an eggnog in a restaurant, became violently ill seven hours later and had to be hospitalized.

The cook at this restaurant, who was off duty on the day in question but had his meals there, was admitted to the same hospital the following day, as was also another customer.

The inspector in the case was seriously ill with chills, fever of 105 F, diarrhea and prostration. He had to remain hospitalized for a period of about two weeks during which time he lost 15 pounds.

Examination of 25 employees at the restaurant in question disclosed 12 of them harboring S. montevideo, which was the organism found in each of the 3 hospitalized cases, but none of the employees showed any symptoms whatsoever.

In another instance an outbreak of S. montevideo food poisoning was suspected of being associated with a restaurant and examination disclosed a cook to be harboring the organism. An outbreak occurred later under conditions in which this cook could not be possibly implicated. The indications were that either others, who were not detected upon examination, were responsible, or that rodents were associated with the outbreak. The incident was briefly as follows:

An individual taken seriously ill with symptoms of gastro-enteritis was hospitalized. He had chills, followed by fever, headache, nausea without vomiting, cramping intestinal pains and frequent watery stools. He ran a spiking temperature for several days, but under treatment his diarrhea cleared up. He was discharged after seven days, completely recovered except for generalized weakness and lassitude.

A member of the Salmonella group was isolated from his stool submitted to the Health Department for identification and was later found to be S. montevideo. Epidemiologic follow-up was concurrently instituted. It was ascertained that this individual was at a banquet together with approximately 50 other individuals on September 25, 1948, and that a number of the guests had become quite ill, though none of the others was hospitalized.

Stools were obtained from 40 who had attended this function (37 were ill but only one was hospitalized) and S. montevideo was isolated from 34 of these. On recognition that this outbreak was associated with S. montevideo, 15 of the 37 individuals who had symptoms of gastro-enteritis were induced to go to a physician for treatment. This was the third day after infection. Serum specimens were obtained at this time and again two weeks later from each of these individuals, and agglutination titers of these sera were determined against S. typhi (O and H), S. paratyphi A and B, and the strain of S. montevideo isolated from the respective cases. All of these cases were in adults who had previously been inoculated with TAB

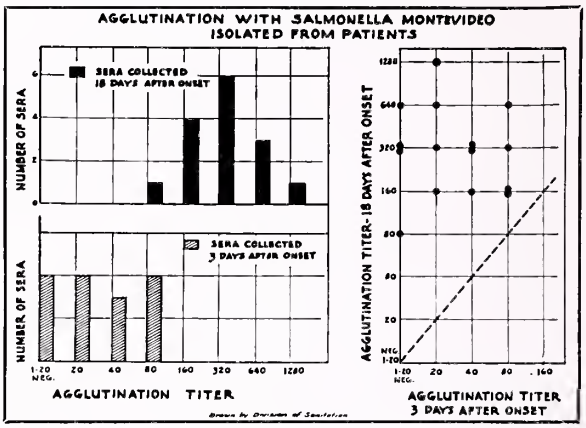


FIG. 1.—Development of agglutinins against Salmonella montevideo in fifteen cases.

vaccine in 1942, and except for 2 instances, had received booster shots in 1944. In no instance was there any change in the agglutination titer of the individual sera collected on September 28 (three days after infection) and October 13 (18 days after infection) against typhoid H or O, paratyphoid A, or paratyphoid B. In contrast to this, there was a rise in titer against S. montevideo in the interval between September 28 and October 13. Thus, of 4 individuals who were negative in a dilution 1:20 shortly after the onset of the illness, one agglutinated in the dilution 1:80, two in 1:320, and one in 1:640, approximately two weeks later. In four instances in which weak agglutinations were obtained in a dilution 1:20 three days after onset, the agglutination titers rose to 1:160, 1:320, 1:640, and 1:1280. In three instances with an initial agglutination of 1:40 there was a rise in one individual to 1:160 and two others to 1:320 and finally among 4 individuals who, on the third day after infection showed a titer of 1:80, 2 gave a titer of 1:160, one 1:320 and one

to 1:640 two weeks later. The results are indicated graphically in Figure 1.

The results show strikingly, first: that immunization with TAB did not protect against S. montevideo; second: that there must have been a blood stream invasion, either by the organism or some of its antigenic components, which elicited a very definite serological response to S. montevideo; and third, that this serological response to food poisoning associated with S. montevideo did not elicit an anamnestic reaction against antigens associated with TAB vaccination.

Examination of foodhandlers at this time, in the restaurant implicated, did not disclose any S. montevideo infected individuals, and the cook who had previously been found to be a carrier had not been at the restaurant in question for some time. (It is, of course, recognized that one or two examinations with negative results are not indicative of absolute freedom from such infection.)

Suspicion fell upon the possibility of infection of food by rodents. Through the cooperation of the Bureau of Rodent Control, a campaign of trapping was instituted. The results of examination of 85 mice and 20 rats trapped in the restaurant in question are indicated in Table 8.

TABLE 8.—*Incidence of Salmonella in Mice and Rats Trapped in Restaurants where Food Poisoning Outbreaks Occurred.*

Salmonella Type	INCIDENCE AMONG 85 MICE*	
	Intestine	*Spleen*
S. anatum	4	1
S. montevideo	5	1
Group D.	1	
Group B.	1	
	INCIDENCE AMONG 20 RATS	
S. panama	1	
S. typhimurium	1	1

* Salmonella isolated from 9 mice and one rat. Two mice and the rat harbored two types of Salmonella.

It will be noted that only one rat was found to be infected. S. panama and S. typhimurium were isolated from its intestinal tract and S. typhimurium was found also in the spleen of that animal.

S. anatum was isolated from the intestinal contents of 4 of the mice, one of which also showed this organism in the spleen, and S. montevideo was encountered in the intestinal tract of 5 of the mice and, here again, 1 showed infection of the spleen.

In several instances more than one type of Salmonella was found in a single animal. S. montevideo and S. anatum were isolated from the intestinal contents of one mouse which contained only S. anatum in the spleen. In another instance, S. montevideo and a member of Salmonella group D, at present unidentified, were encountered in the intestine and only S. montevideo in the spleen.

Summary

In view of the universal TAB vaccination instituted in Hawaii during the war and the present practice of vaccinating children at 3 years of age, a very large proportion (estimated at 95 per cent of those over 3 years of age) have been subjected to at least one course of TAB inoculations. The age distribution of various types of Salmonella might therefore be pertinent as respects effect of vaccination on age susceptibility.

Isolations of 275 strains of Salmonella from 273 individuals were obtained from feces of 84 hospitalized cases, 54 missed cases, and 137 asymptomatic carriers.

The Salmonella types most frequently encountered were as follows: S. montevideo in 171 (62 per cent); S. typhimurium 20 (7.3 per cent); S. anatum 15 (5.5 per cent); S. derby 13 (4.7 per cent); S. oranienburg 11 (4.0 per cent) and S. grumpensis 7 (2.5 per cent). These six types accounted for 86 per cent of the strains of Salmonella encountered.

Of 20 strains of typhimurium encountered, 13 were from hospitalized cases and 1 missed case among unvaccinated children under 3 years of age, whereas only 1 case and 5 carriers were from vaccinated individuals over 20 years of age, and 4 of these asymptomatic carriers were parents of hospitalized children.

All the explosive food-poisoning outbreaks in Honolulu were due to S. montevideo. This organism was isolated from nine (11 per cent) of 85 mice trapped in food establishments.

Evidence is presented on the severity of symptoms and serological response to infection with S. montevideo.

Among 40 cases of salmonellosis in unvaccinated children under 3 years of age and 98 cases in older (presumably TAB vaccinated) individuals, 24 (60 per cent) of the former and only 10 (10 per cent) of the latter were due to Salmonella types which have somatic antigens in common with those in the TAB vaccine, indicating a possible relation between vaccination and Salmonella type susceptibility.

Conclusions

The findings pose the questions: (1) whether TAB vaccination, as practiced in Hawaii, should be advanced well ahead of the age of 3 years, and (2) whether a member of group C Salmonella (perhaps S. montevideo) should be incorporated into the vaccine.

Hypersplenism and the Effect of Splenectomy in Acute Disseminated Lupus Erythematosus

A Preliminary Report

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THE ETIOLOGY of acute disseminated lupus erythematosus (erythematodes)[1] is obscure. There are several theories relating to its cause but not one has proven to be the answer. Some observers[2] attribute the photosensitiveness to any one of the products of metabolism such as acetone, urea, lactic acid, glucose, hemato-porphyrin and tyrosin. The sensitivity to the sunburn rays of the ultraviolet spectrum is one of the most constant and spectacular features of this disease. It is not the causative agent, but undue exposure to sunlight may provoke an acute exacerbation of a latent disease resulting in death within a few days.

Course

In the acute form of disseminated lupus erythematosus the onset may be gradual, with fatigue, loss of appetite, joint and muscle pain, and weakness. This transition from the subacute to the acute type may be gradual, dating back many months, or explosive in type with a fulminating course and death. Occasionally, in the subacute and acute forms of this syndrome, several exacerbations or remissions may be seen. The prognosis of the acute type is grave. The mortality has been listed as high as 100 per cent.[3]

Clinical Manifestations

The typical cutaneous lesion is the butterfly-shaped erythema extending over the bridge of the nose to the cheeks. The edema and erythema are at times hardly recognizable, and at other times the lesions may be swollen and erysipelas-like in appearance. Bluish or hemorrhagic patches around the nails and palmar surface of the fingers with fine telangiectases can be seen. Bluish edematous lesions can appear anywhere, but usually are seen on the exposed parts of the body. A variety of polymorphic lesions may be noted in the skin and mucous membranes, including crusted, hemorrhagic ulcerative, papular and pellagroid changes.[4]

The systemic manifestations include anemia, leukopenia, thrombocytopenia, fever of the septic type, adenopathy, arthralgia, splenomegaly, pleurisy, pericarditis, endocarditis, bronchopneumonia and vascular lesions of the retina. The kidneys are usually involved, as evidenced by the presence of microscopic hematuria, casts, and albuminuria. Microscopically they show "wire loop glomeruli" or the kidney of eclampsia.[2] In the great majority of cases no evidence of tuberculosis is found at autopsy.[5] Occasionally, the atypical verrucous endocarditis described by Libman and Sacks is found.[6] In 20 to 25 per cent of cases, some endocarditis is demonstrable at autopsy.[7]

Treatment

The treatment of this syndrome has been largely symptomatic and supportive. Penicillin and sulfonamides have been found to be of little value.[8] Rose and Pillsbury[4] attempted to demonstrate the relationship between ovarian function and acute erythematodes. They suggest a possible relationship but indicate further investigation should be continued.

We have recently observed two cases of this disease complicated by severe thrombocytopenic purpura. They suggest a possible role of the spleen in the pathogenesis of this syndrome. The beneficial effects of splenectomy upon the purpuric manifestations as well as the lupus erythematosus are of considerable interest.

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[1] Some dermatologists favor the name "erythematodes" as described by Jadassohn. "Lupus" is a misnomer, as a tuberculous etiology seems unlikely.

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[8] Rothman, S., and Felsher, Z.: Subacute and Acute Disseminated Lupus Erythematodes, Med. Clin. North Amer. 31:198 (Jan.) 1947.

Case Reports

CASE 1. I. M.; a white married woman, aged 37 years, was found to have the typical skin lesions of chronic discoid lupus erythematosus by the late Dr. J. T. Wayson in 1934. She had received various types of therapy, including injections of gold, bismuth, and liver preparations, with varying success. The patient experienced repeated episodes of general malaise and mild arthralgia and ran a low-grade fever. Although there were periods of complete remission of her subjective symptoms, a macular, scaly eruption of the face, arms and chest persisted. There was a slight to moderate anemia and leukopenia. Repeated urinalyses revealed a very slight albuminuria, and occasional red cells but no casts.

In March of 1946 the facial skin lesions became more erythematous and increased in number. Purpuric manifestations in the skin were noted for the first time. Her malaise, weakness and arthralgia became progressively worse. She was given repeated transfusions of citrated blood at intervals of one to three weeks with no significant change in the declining course of her illness.

The patient was readmitted to The Queen's Hospital on October 18, 1946, because of a severe generalized headache, throbbing pain in the left shoulder and severe purpuric manifestations in the skin and the mucous membranes. There was slight nuchal rigidity, and the signs of a left hemiplegia became gradually evident. There was a rapidly increasing blurring of the vision which rapidly progressed to almost total blindness. Examination of the fundi revealed extensive hemorrhage into the retina. The skin lesions were typical of acute disseminated lupus erythematosus.

The blood counts on admission showed: red cells 2.9 million, hemoglobin 8.4 gm. (64%); white cells 7200; polys 55%, lymphocytes 42%, eosinophiles 1%, monocytes 2%. The platelet count was 36,000. Within a few days, the red cells dropped to 1.8 million, the hemoglobin to 6 gm. and the platelets down to 3,000. The white cells also dropped to around 3,000 to 4,000 with about 50% neutrophiles. Repeated transfusions of citrated blood maintained the red count at normal levels, but the neutropenia, and especially the thrombocytopenia, were alarmingly persistent. Other supportive measures, including penicillin in massive dosages of 2.5 million units daily, intramuscular liver extract injections, Benadryl, and parenteral and oral amino acids, all had no appreciable effect upon the clinical course. There was a slight drop in the temperature which generally ranged up to 101 F. but the purpuric manifestations progressed and the skin lesions of the erythematodes continued to appear active.

Examination of the aspirated sternal marrow smears revealed a moderately hyperplastic marrow with increased activity of both the erythrocyte and the granulocyte series. The maturation was considered to be normal except for a slight tendency towards immaturity in the granulocyte series. The most striking feature was the increase in the number of megakaryocytes, the majority of which were rather immature. Mature megakaryocytes showing actual platelet formation were encountered only rarely. The findings were compatible with an idiopathic thrombocytopenic purpura as described by Dameshek and Miller. There was nothing to suggest a direct involvement of the bone marrow by any underlying disease or specific poison.

Splenectomy was performed successfully by Dr. Douglas Bell on November 13, 1946. The spleen weighed 140 grams. Pathologically, it was not remarkable, except for a few small areas of healed infarction. It was not diagnostic of any specific disease.

The immediate postoperative course was quite stormy, but the patient became cheerful and experienced very little discomfort by the fourth postoperative day. Forty-eight hours after the splenectomy the platelet count reached the peak of 59,000 per cu. mm., the white cells 23,100 with 90% polys. Despite the unimpressive laboratory report, the most striking feature postoperatively was the complete cessation of the purpuric manifestations. Equally gratifying was the rapid subsidence of the "activity" of the erythematodes. The edematous blush gradually faded away, leaving only a scaly residuum. She was rapidly regaining her strength and weight. Her vision and hemiplegia were appreciably improved. The red cell count and hemoglobin gradually reached normal levels and remained normal. There was a persistent moderate leukocytosis averaging 15,000 per cu. mm. with around 85% polys. The platelet counts varied from 20,000 to 50,000 per cu. mm.

During the subsequent three years, the patient has been completely free from symptoms of erythematodes and purpura, and has been up and about, performing light work. Her entire blood picture, including the platelets, has been repeatedly within normal limits. Recently, she developed a faint macular rash over both cheeks which was attributed to repeated exposure to sun glare. However, she has remained afebrile and symptom free.

CASE 2. B. Y.; a 22-year-old Japanese woman, was admitted to The Queen's Hospital for the first time on June 1, 1946, because of exacerbation of skin lesions on the face and chest, accompanied by increasing malaise, fatigue, chilly sensations and fever. She had not felt quite well for almost a year. About one month before her admission, she had noted slightly indurated, erythematous macules averaging two centimeters in diameter on her cheeks and anterior chest for the first time. Following prolonged exposure to sunlight, she had noted that the lesions tended to spread and become more prominent, accompanied by general malaise, fatigue and chilly sensations.

There was no past history of tuberculosis or exposure to the disease. Her general health had been excellent and she had always enjoyed prolonged exposures to sunlight without untoward effect. There was no history of bruising or bleeding tendency prior to the present illness.

The patient was well-developed and fairly well-nourished and did not appear acutely ill. There was an indurated, erythematous lesion with the typical "butterfly" distribution over the face and a similar lesion on the anterior chest wall. The physical examination was otherwise not remarkable. There was no lymphadenopathy and the spleen was not palpable.

The laboratory examination revealed: red cells 4.12 million, hemoglobin 13 gm.; white cells 4100, polys 49%, lymphs 50% and monocytes 1%. The urinalysis was normal; the sedimentation rate (Westergren) was 27 mm. in one hour. The serum protein showed albumin 2.22 gm. and globulin 4.18 gm. per 100 cc. Roentgenogram of the chest was negative.

The patient was treated by general supportive measures, including liver extract injections and also tincture of iodine orally as prescribed by Benson Cannon. She felt symptomatically worse and ran a low-grade fever up to 100 F. Within a few days she developed a leukopenia of 2,050 cells per cubic mm., with polys 18%,

lymphocytes 79% and eosinophiles 3%. She was given a 500 cc. transfusion of citrated blood. Two days later, her fever gradually rose to a peak of 105 F. and gradually subsided. Simultaneously her general condition became critical and her skin lesions decidedly more acute and diffuse. Those in her cheeks became necrotic and ulcerated. This was followed by a gradual improvement, accompanied by a drop in the fever and restoration of the blood picture to a more normal level. The ulcerations healed readily and she remained in complete remission for a period of three months.

She was readmitted for the second time on March 15, 1947, because of recurrence of skin lesions on the face and trunk, accompanied by increasing malaise, anorexia, fever and arthralgia. She had not felt very well for about six months and her skin lesions reappeared three weeks before her readmission. The physical findings, including the skin lesions, were essentially similar to those at the previous admission, except for a moderately severe generalized lymphadenopathy. The spleen was not palpable.

The laboratory examination revealed red cells 4.65 million, hemoglobin 12.6 gm.; white cells 5,000 with polys 60%, eosinophiles 3% and lymphs 37%. Urinalysis showed a 2 plus albumin, specific gravity 1.002 and a few red cells and white cells, but no casts. The sedimentation rate was 47 mm. in one hour.

The patient ran a spiking type of fever up to 104 F. and her condition became rapidly worse. About ten days after her admission she began manifesting extensive purpura for the first time. The red cell count dropped to 3.24 million and the platelet count was 16,000. The bleeding time was 16 minutes and clotting time was normal; there was no clot retraction after twenty-four hours. The prothrombin time was normal. The tourniquet test was strongly positive. A study of the aspirated sternal marrow smears showed a moderate hyperplasia with a leucocyte-erythrocyte ratio of 4:1. There was a slight tendency towards immaturity of the granulocytes, otherwise the maturation appeared orderly and normal. The most striking feature was the presence of increased numbers of megakaryocytes, including many immature forms. Evidence of platelet formation in the cytoplasm of these megakaryocytes was only rarely encountered. The general picture was indistinguishable from that of an idiopathic thrombocytopenic purpura.

The complication of a severe, generalized purpura in a patient already seriously ill with an acute disseminated lupus erythematosus made her condition critical. She appeared moribund.

An emergency splenectomy was performed on March 31, 1947. The spleen weighed 95 grams and was not remarkable anatomically. The patient had been an extremely poor surgical risk and did not tolerate the procedure well. A portion of the tail of the pancreas was excised with the spleen and some active bleeding from this area could not be stopped satisfactorily. The patient returned from surgery in shock and not much hope was held for her recovery. The patient received a total of 2500 cc. of citrated blood within eight hours of the operation and another 1500 cc. of blood during the following twenty-four hours. Suitable amounts of calcium gluconate were injected intravenously following the transfusions in order to help recalcify the patient's circulating plasma. No evidence of purpura was encountered after the splenectomy and the platelets rose from 140,000 per cubic mm. twenty-four hours postoperatively to 262,000 within a few days. The immediate postoperative course was extremely stormy and was accompanied by a severe delirium and fearful hallucinations which lasted several days. Within two weeks after the splenectomy, the fever had returned to normal, the wound had completely healed and the patient had improved both subjectively and clinically. The skin lesions had completely regressed and were replaced by a slight pigmentation. She was discharged on May 3, 1947, thirty-five days after surgery, free from all symptoms except for a persistent, distressing, dull ache in the mid-epigastrium.

The patient was readmitted for the third time on May 24, 1947, because of the persistent epigastric pain, which had become progressively worse and was now associated with nausea and vomiting, and diarrhea. There was no arthralgia nor any evidence of activity of the erythematodes. The pigmentations were still present in the skin. There was a moderate degree of emaciation and dehydration. The abdomen was flat, soft and very tender all over to light palpation.

The laboratory examinations revealed red cells 5.2 million, hemoglobin 13 gm.; white cells 6,300 with polys 66%, monocytes 2% and lymphocytes 32%. The platelet count was 543,000. The Weltmann coagulation band was 6 (normal), the sedimentation rate 2 mm. in one hour and the serum albumin 2.9 gm.% and serum globulin 2.8 gm.% Urinalysis showed 3 plus albumin and many leucocytes and red cells.

Despite symptomatic therapy her symptoms persisted. She became steadily worse and suddenly expired on the sixteenth hospital day.

The post-mortem examination revealed the cause of death to be a massive hemorrhage into the peritoneal cavity from the splenic pedicle. The remaining tail and a major portion of the corpus of the pancreas were the seat of extensive necrosis, hemorrhage, acute and organizing inflammation. There was also a moderate pleural effusion with pulmonary edema and atelectasis. The liver showed a moderate degree of fatty metamorphosis. Except for a moderately severe degre of fibrinous pleural reaction, which may well be attributed to the severe passive congestion and effusion, there was nothing in the microscopic sections which might be interpreted as pathognomonic of active lupus erythematosus. An interesting incidental finding was a small pinealoma which was histologically benign.

Discussion

Recently, Doan and Wright[9] have called our attention to the role played by the spleen in the production of certain blood dyscrasias characterized by a reduction in one or more of the cellular elements of the blood. These they designated as primary or secondary "splenic panhematopenia," depending upon whether the condition was primary or secondary to some known underlying disease involving the reticulo-endothelial system. They believed that the pathologic splenic function consisted of an abnormal sequestration of the circulating blood cells by the phagocytic cells of the spleen. They stressed the importance of differentiating this syndrome from a panhematopenia due

[9] Doan, C. A., and Wright, C. S.: Primary Congenital and Secondary Acquired Splenic Panhematopenia, Blood 1:10 (Jan.) 1946.

to primary or secondary bone marrow hypoplasia. Dameshek believes that the spleen normally exerts an inhibitory or regulatory influence upon the bone marrow cells, and suggests a hormonal relationship between the spleen and the bone marrow. Reduction in the number of peripheral blood cells to a pathologic degree by splenic influence, whether due to primary or secondary causes, has been designated as "hypersplenism."

The bone marrow findings in our cases were indistinguishable from those of the idiopathic thrombocytopenic purpura as described by Dameshek and Miller.[10] Splenectomy stopped the purpura and apparently induced a complete remission in the activity of the underlying disease. Both of these patients were so critically ill with the systemic and hematological manifestations of the disease that, had splenectomy not been resorted to, they would probably have expired within twenty-four to forty-eight hours.

There is no explanation for the slow rise in the platelet count after splenectomy in case one. However, the cessation in the purpuric manifestations in both cases immediately after the operation was striking. Equally impressive was the rapid remission in the activity of the underlying acute lupus erythematosus. The latter may be attributed to pure coincidence, but we are inclined to the hypothesis that the sudden removal of a large mass of reticulo-endothelial tissue restored a pathological equilibrium towards a more normal state.

In case two, splenectomy was considered several days before the onset of the purpuric symptoms. It was thought that such a procedure might avert the occurrence of a severe purpura and possibly induce a remission in the underlying disease. Had the splenectomy been performed when the patient was in a more favorable condition, the result might not have been so disastrous. Since our experience with the above cases, we have observed three others with the acute disseminated disease in varying degrees of activity. However, none of these presented any purpuric manifestations. Splenectomy was performed in all three as a prophylactic measure. In two of them there was a rapid remission in the disease. The third developed serious postoperative complications but the clinical manifestations of the lupus erythematosus subsided shortly after the splenectomy. Further data on these patients will be reported after more prolonged observation.

Summary

The frequent occurrence of some hematological manifestations (neutropenia, thrombocytopenia) of "hypersplenism" in disseminated lupus erythematosus suggests an abnormal activity of the reticulo-endothelial system as the basic disorder in the disease.

The prompt remission in the activity of the disease, as well as in the serious hematological manifestations, after splenectomy appears to support the idea of the reticulo-endothelial disorder.

The beneficial effects of splenectomy upon acute disseminated lupus erythematosus prompt us to recognize this procedure as a valuable aid in the treatment of this usually fatal disease.

We wish to further point out the desirability of considering splenectomy as a prophylactic measure against a rapid progression of the disease as well as against the hematological manifestations. Whether or not this can be accomplished for a worthwhile interval is undetermined. Although no cure is to be expected, splenectomy appears to offer the greatest promise among the large array of palliative measures used in this disease.

[10] Dameshek, Wm., and Miller, E. B.: The Megakaryocytes in Idiopathic Thrombocytopenic Purpura, a Form of Hypersplenism, Blood 1:27 (Jan.) 1946.

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The Oriental Fruitfly as a Possible Cause of Myiasis in Man

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TWO CASES of accidental gastrointestinal myiasis of man with the larvae of Dacus sp. have recently been reported in Honolulu by Bonnet [1]. Living larvae of a dacine fly were reported from fecal specimens submitted for examination to the Territorial Board of Health. In the case of a four-year-old boy the larvae apparently were found on two separate occasions after the ingestion of semi-ripe and ripe guavas. The other case showed the presence of fly maggots on a single occasion and there was no history of gastric or intestinal disturbance in either case. Although the larvae in both cases were determined by comparison with known Dacus larvae, none of them were apparently reared through to the adult stage.

As far as is known, this is the first record of human gastrointestinal myiasis by fruitflies in the Trypetidae. A record of fruitfly larvae in human feces is perhaps not unexpected since the Oriental fruitfly has become widely established in Hawaii and many fruits containing first and second instar larvae are undoubtedly eaten on numerous occasions. The interesting part of this record, however, is the report that the larvae were found *alive* in the fecal samples, which were said to have been reasonably safe from contamination.

A review of the literature on human myiasis emphasizes the unique character of the above record. A well known report on this subject by Dove[2] lists only one fruitfly, Drosophila funebris (F), as having been the cause of one case of accidental intestinal myiasis recorded from the North American literature. James,[3] who gives a recent comprehensive review of human myiasis based on world wide records and literature, includes only the Drosophilidae as having one or two species possibly concerned in accidental intestinal myiasis. This paper also lists the case of D. funebris cited above and questions the authenticity of records involving D. melanogaster Meig. In this connection it should be also noted that Causey[4] found larvae of D. melanogaster unable to survive gastrointestinal passage when experimentally fed to a puppy.

From the foregoing it is evident that reports of human myiasis involving species other than the well known myiasis-producers must be accepted only provisionally. Very little experimental work has been done on myiasis; the bulk of our information has been gleaned from case histories.

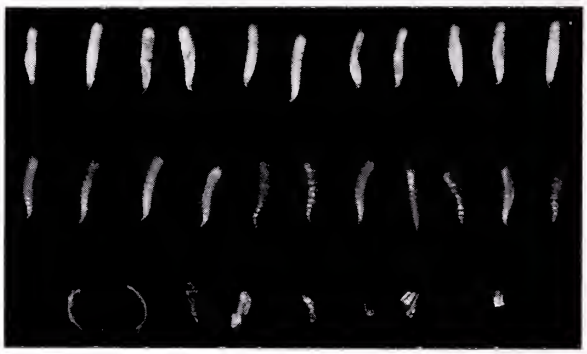


FIG. 1. Top row: normal third instar *Dacus dorsalis* larvae immediately after removal from infested mango (⅔ natural size).
Middle row: intact larvae recovered from human feces after passage through gastrointestinal tract.
Bottom row: same, but showing evidence of digestion and partial maceration.

This applies especially to accidental myiasis involving gastrointestinal and genito-urinary tracts. In spite of the overwhelming negative evidence it may be possible, according to Riley,[5] that modified enteric conditions, especially in children, may create an environment in which certain normally free-living fly larvae may be able to live and even undergo development.

In view of the significance of the above report, the authors decided to test experimentally the possibility of human myiasis with trypetid larvae. It was also suggested that the ability of any one of the three species of important fruitflies in Hawaii to pass through the human alimentary tract unharmed might have some implications in respect to the present recognized danger of introducing those pests to the mainland.

Balock and Kartman[6] in a preliminary experi-

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[1] Bonnet, D. D.: Myiasis in Children, Proc. Haw. Ent. Soc. 13:201, 1948.

[2] Dove, W. E.: Myiasis of Man, Jour. Econ. Ent. 30:29 (Feb.) 1937.

[3] James, M. T.: The Flies That Cause Myiasis in Man, U.S.D.A. Misc. Pub. 631 (Sept.) 1947.

[4] Causey, O. R.: Experimental Intestinal Myiasis, Amer. Jour. Hyg. 28:481 (Mar.) 1938.

[5] Riley, W. A.: The Possibility of Intestinal Myiasis in Man, Jour. Econ. Ent. 32:875 (Dec.) 1939.

[6] Balock, J. W., and Kartman, L.: Note on Experimental Gastrointestinal Myiasis in Pigs with the Larvae of Dacus dorsalis Hendel, Proc. Haw. Ent. Soc. 13:201, 1948.

ment fed each of two recently weaned pigs 100 living third instar Dacus dorsalis larvae by drenching. Fecal examinations twenty-four hours later resulted in the recovery of 16 larvae in various stages of digestion. In most cases nothing but the larval skins remained intact. Another examination forty-eight hours after feeding produced four additional larval skins.

Later experiments involved human volunteers and several different animals as further comparative evidence. The human tests were conducted with seven men whose ages ranged from 18 to 46. Each volunteer swallowed 25 living third instar larvae of Dacus dorsalis in small amounts of water. The larvae were obtained from infested mango fruits. All stools subsequent to this feeding were collected in waxed ice cream containers which were sealed with scotch tape immediately after defecation to prevent any possibility of contamination. The fecal specimen was brought to the laboratory for screening at the earliest convenience. This occurred on the morning following the day of voluntary infestation. The fecal specimens were run through a number ten sieve into a large crystallization dish and the larvae found were observed for evidence of life. In several cases two fecal samples were screened before most or all of the larvae were recovered.

recovered within about seventeen hours. Most of the unrecovered larvae were found in the second stool about twenty-four hours after the first. In one instance 72 per cent of the larvae were recovered in the second stool at about forty-eight hours subsequent to the first defecation.

Without a single exception all of the third instar larvae of Dacus dorsalis which passed through the human alimentary tract were dead in the first and second defecations subsequent to ingestion. The majority were recovered in very good condition with little or no evidence of digestion. In some instances a few of the maggots showed evidence of digestion since only the clear larval skins remained and in one case it was almost impossible to recognize the larvae because of severe maceration (Fig. 1).

Several tests were also conducted with various animals for comparative evidence and these data are summarized in Table 2 which also contains the preliminary experiment with pigs mentioned above. The pigs and dogs were given living larvae by drenching and the birds were infested by aspirating the larvae directly into the crop. The feces were examined as soon as possible after defecation, but no special precautions were taken to prevent contamination.

The results of these tests indicate that no larvae of Dacus dorsalis survived passage through the

TABLE 1.—*The fate of living third instar larvae of Dacus dorsalis when ingested by man.*

	LARVAE INGESTED			FIRST STOOL EXAMINATION			SECOND STOOL EXAMINATION				
HUMAN SUBJECT	*Date (1948)*	*Time P.M.*	*No.*	*Date (1948)*	*Defecation time A.M.*	*Findings*	*Date (1948)*	*Defecation time A.M.*	*Findings*	% OF INTACT LARVAE OR SKINS RECOVERED	REMARKS
J.W.B.	5-17	2:10	25	5-18	8:00	17 dead larvae	5-19	8:45	7 dead larvae	96	No evidence of digestion
L.K.	5-17	2:10	25	5-18	7:00	5 dead larvae	5-20	8:00	18 dead larvae	92	Several larvae partially digested
N.E.F.	5-17	2:00	25	5-18	11:15	13 dead larvae	5-20	5:00	Several dead larvae	52*	Larvae severely macerated in second stool
S.S.	5-17	2:15	25	5-18	6:25	25 dead larvae	—	—	—	100	No evidence of digestion
A.M.	5-17	3:45	25	5-18	7:25	5 dead larvae	5-19	7:25	20 dead larvae	100	No evidence of digestion
G.B.M.	5-18	1:30	25	5-19	11:45	22 dead larvae	—	—	—	88	No evidence of digestion
R.Y.	5-18	1:30	25	5-19	7:00	25 dead larvae	—	—	—	100	No evidence of digestion

* Based solely on larvae found in first stool.

The data resulting from these tests are summarized in Table 1. In two cases it was possible to recover 100 per cent of the larvae ingested within sixteen to eighteen hours, and it might be noted that these were associated with a very loose stool. In most of the other instances between 52 and 88 per cent of the larvae were recovered within eighteen to twenty-two hours after ingestion. In two instances only 20 per cent of the maggots were alimentary tract of pigs, dogs, and various birds. The degree of digestion of the larvae by these animals was much greater in all instances than that observed in the human subjects. Larvae recovered from the pigs and dogs were almost completely cleared of all internal substance, leaving only the intact skins. These could be easily used for specific determination since the spiracular plate and mouth hooks remained intact. The larvae

TABLE 2.—*The fate of living third instar larvae of Dacus dorsalis when ingested by various animals.*

	LARVAE INGESTED			1ST EXAMINATION OF FECES			2ND EXAMINATION OF FECES			% INTACT LARVAE OR SKINS RECOVERED	
ANIMAL	*Date*	*Time*	*No.*	*Date*	*Time A.M.*	*Findings*	*Date*	*Time*	*Findings*		REMARKS
2 Weanling pigs	2-3 1947	10:00 AM	100 ea	2-4-47	10:30	16 dead larvae	2-4-47 2-5-47	4:00 PM	4 dead larvae	10	Mainly larval skins
White Leghorn chick—5 weeks	5-17 1948	4:30 PM	30	5-18-48	9:30	larval skins	5-19-48	9:00 AM	larval* skins	0	All skins severely macerated
German Shepherd dog—6 months	5-29 1948	1:30 PM	60	5-30-48	10:00	28 dead larvae	5-31-48	8:30 AM	14 dead larvae	70	Mainly larval skins—some macerated
Pigeon	5-29 1948	9:00 AM	25	5-30-48	8:00	larval skins	—	—	—	0	Severely macerated
Ringneck dove†	5-29 1948	9:30 AM	25	5-30-48	8:30	4 dead larvae	5-31-48	10:00 AM	Negative	0	Broken into small pieces
Mongrel dog—3 mos.	6-5 1948	2:30 PM	50	6-6-48	11:00	33 dead larvae	6-6-48	5:30 PM	8 dead larvae	82	Mainly larval skins—some macerated

* Third examination 5-20-48, 9:00 A.M., was negative.
† Streptopalia decaocto (Privalszky).

ingested by the birds were usually so badly macerated that microscopic examination was necessary to find bits of the chitinous covering and mouth hooks after the fecal contents had been broken up in water. These observations are in agreement with former work by Causey[4] in which other species of dipterous larvae were shown to be killed and digested in the intestinal tract of dogs and cats.

On the basis of these experiments it is difficult to escape the conclusion that accidental enteric myiasis in man with the larvae of Dacus dorsalis is highly questionable. This is not to imply that such a finding is impossible, especially in cases concerning young children. It is suggested, however, that the historic evidence and recent experimental evidence concerning fruitflies, in general, make the chances of human myiasis with these species highly improbable. Consequently, case histories of accidental human enteric myiasis involving "fruitflies" should be accepted provisionally and might well be tested experimentally before definite conclusions are drawn.

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The Survival-Time of Mycobacterium Tuberculosis in Poi

Studies in the Bacteriology of Poi, II*

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OUR INTEREST in the possible role of poi in the dissemination of communicable diseases led us to investigate the possibility that poi may play a part in the spread of tuberculosis. Earlier studies in this laboratory by Fung and Bushnell[1] have shown that if poi should become contaminated with pathogenic organisms of the intestinal group, it can, like other foods, harbor the viable organisms long enough to make the poi a potential vector of the enteric diseases. The manner in which poi is prepared, distributed, and consumed made us wonder if it is not just as possible that poi might serve as a vector for tubercle bacilli as well. Our first concern, then, was to determine the length of time tubercle bacilli can survive in poi as it is prepared for consumption in the Hawaiian home.

Methods

The technics for this study had been well established in the earlier work on the intestinal pathogens, but the use of Mycobacterium tuberculosis as a test organism presented technical problems of its own which, fortunately, were solved more readily than they might otherwise have been by the recently devised media of Dubos and Middlebrook.[2]

Technics

In brief, zero-hour poi was obtained and mixed with two parts of water, the mixed poi was divided into two equal portions of 200 ml. each, and each portion was inoculated with a known number of viable tubercle bacilli. One portion was incubated at room temperature and the other in the refrigerator, and then daily subcultures of small samples of each portion of inoculated poi were made to determine how long the tubercle bacilli remained viable. This series of tests was performed 13 different times before it was felt that sufficient evidence had been obtained upon which to base any conclusions.

Zero-hour poi was obtained from the factory and, at the University laboratory, was mixed with two parts of water to give a mixture of the popular "three-finger" consistency. After the pH of this mixture had been determined electrometrically, two portions of the poi, each of 200 ml., were measured into two clean beakers.

No attempt at using aseptic technic to keep the poi from being contaminated with air-borne or water-borne organisms was made during the mixing of the poi and in its subsequent distribution and testing because it was the intention of these studies to subject the poi samples to the same treatment that they were likely to receive in the home. Once the poi samples were inoculated with M. tuberculosis, however, they were treated with proper respect and precaution.

Each portion of the poi was inoculated with a measured number of the organisms of the particular strain being studied. Three strains of M. tuberculosis were used as the test organisms: one was the Seibert strain, of uncertain age and unknown virulence, which has been maintained in the stock culture collection of this department for so many years that it can grow almost overnight on almost any artificial medium; the two other strains, Leahi 1 and Leahi 2, were virulent strains recently isolated from patients at Leahi Hospital, in Honolulu. The Seibert strain was used somewhat as a practice organism; when technics had been perfected with it, tests were performed with the two virulent strains. Stock cultures of the Leahi strains were maintained on Petragnani's medium, the substrate on which they had been isolated.

The cultures of tubercle bacilli from which the inocula for the poi were obtained were grown for two weeks in the liquid form of the medium of Dubos and Middlebrook.[2] The medium was prepared according to this formula:

Basal medium:		
KH_2PO_4	1.0 gm.	heat in 100 ml. of distilled water to dissolve.
Na_2HPO_4. 12 H_2O	6.3 gm.	
asparagin	1.0-2.0 gm.	
Then add:		
distilled water	850 ml.	
casitone	1-2 gm.	
ferric ammonium citrate	0.005-0.05 gm.	
$MgSO_4.8H_2O$	0.01 gm.	
$CaCl_2$	0.0005 gm.	
$ZnSO_4$	0.0001 gm.	
$CuSO_4$	0.0001 gm.	
Adjust to pH 6.8		

To each 900 ml. of this basal medium add 0.5 ml. of Tween 80. Distribute the medium in 10 ml. quantities in test tubes, plug with cotton, sterilize by autoclaving for 20 minutes at 15 pounds' pressure, and store in the refrigerator until needed. Just before use, add to each tube 1 ml. of sterile solution of albumin (bovine plasma, fraction V)—sterilized by filtration—and 1 ml. of a sterile 5% glucose solution.

Inocula of the tubercle bacilli were prepared by making a 1:1000 dilution of the supernatant liquid from a culture of the test organism grown for two weeks in the fluid form of Dubos' medium.

One ml. of this 1:1000 dilution of the test organism was mixed thoroughly into each of the two portions of poi, whereupon each beaker was covered with half of a petri dish. One of the inoculated portions was placed in

* This investigation was supported in part by a research grant from the Division of Research Grants and Fellowships of the National Institutes of Health, U. S. Public Health Service.

[1] Fung, G., and Bushnell, O. A.: The Possible Role of Poi in the Epidemiology of Infectious Intestinal Diseases, HAWAII MED. JOUR. 7:296 (Mar.-Apr.) 1948.

[2] Dubos, R., and Middlebrook, G.: Media for Tubercle Bacilli, Am. Rev. Tuberc. 56:334 (Oct.) 1947.

the refrigerator, at 4 C., and the other was kept at room temperature.

At the same time, suitable dilutions of the 1:1000 dilution of the test organisms were plated in duplicate, in order to estimate the number of organisms in each milliliter of the inoculum. The solid form of Dubos' medium was prepared in this manner:

> To each 900 ml. of the basal medium (as outlined above) were added 15 gm. of agar and 0.5 ml. of Tween 80. The mixture was heated to boiling to dissolve the agar and was distributed in 100 ml. quantities in 12-ounce prescription bottles. After sterilization in the autoclave at 15 pounds' pressure for 20 minutes, these bottles were kept in the refrigerator until the medium was needed. When it was to be used, the medium was melted and cooled to 60 C. and 10 ml. of a sterile 5% solution of albumin (bovine plasma fraction V) were added to each 100 ml. portion.

The plates were incubated for two weeks at 37 C., aerobically, but in closed jars to prevent desiccation, before they were examined and the numbers of organisms per ml. of inoculum were calculated from the colony counts.

Attempts to recover the tubercle bacilli from the inoculated poi were made daily for five days in most of the tests, for thirteen days in two tests. The method used to recover the organisms was essentially the same as that used by diagnostic laboratories for the cultivation of tubercle bacilli from clinical specimens such as sputum.

At each daily sampling, three ml. of the poi were removed from each beaker. These specimens were "digested and concentrated" with 4% NaOH for half an hour at room temperature. The thoroughly washed sediments obtained from these concentrations were resuspended in sterile distilled water to a volume of 3 ml. One-ml. portions from each sample were plated directly, in duplicate, using Dubos' solid medium as the plating agent. With the remaining 1 ml. of each sample, dilutions of 1:10 and 1:100 were prepared, and these, too, were plated in duplicate. The plates were then incubated for 2 weeks at 37 C., in closed jars. Smears, acid-fast stains, and subcultures of typical colonies were made to confirm all counts.

The length of time of survival of the organisms in the poi samples kept at each temperature was considered to be equal to the number of days in which the organisms were recoverable from the poi. In subsequent references, then, the length of survival of the tubercle bacilli will be given in terms of the last day on which they were shown to be viable: e.g., if the organisms were recoverable on the third day after inoculation but not on the fourth day, they will be noted as having survived for three days.

Tests were also made to determine the effect upon the tubercle bacilli of the digestion and concentration treatment with 4% NaOH by plating suitable dilutions of a broth culture of the Seibert strain both before and after the culture had been treated with the sodium hydroxide process.

In order to determine whether or not any saprophytic acid-fast bacilli were present in the poi as it came from the factory, preliminary examinations of the food stuff were made upon eight different samples of poi. Ten grams of the freshly ground poi were digested with 4% NaOH, and smears of the washed sediment, stained by Ziehl-Neelsen's method, were examined microscopically for the presence of acid-fast bacilli.

Data and Discussion

The examination of the eight poi samples for the presence of acid-fast bacilli showed that no saprophytic acid-fast forms were present in these samples. On the basis of this evidence, it was concluded that there was little likelihood that, in the course of these studies, saprophytic acid-fast bacilli would be encountered in the poi to complicate the search for the pathogens.

In these studies, the process of digestion and concentration of the test culture of the Seibert strain seemed to reduce by about one-fourth the number of tubercle bacilli that could be reclaimed. This effect of "concentration"—probably attributable to a combination of the toxic effects of NaOH, the loss of tubercle bacilli in the course of washing and centrifugalization, and to statistically significant errors in diluting—must be remembered in the appraisal of the figures obtained in the tests to reclaim the tubercle bacilli from the inoculated poi.

TABLE 1.—*Survival-time of M. Tuberculosis, Strain Leahi 1.*

DAY OF SAMPLING	pH OF POI	AVERAGE NUMBER OF TBC. PER ML. OF POI
at refrigerator temperature (number of tubercle bacilli inoculated: 40 per ml. of poi)		
1	6.7	12
2	6.6	10
3	6.4	6
4	6.2	6
5	6.1	4
6	5.9	4
7	5.7	3
8	5.5	5
9	5.3	1
10	5.2	2
11	5.0	1
12	4.9	0
13	4.7	0
at room temperature (number of tubercle bacilli inoculated: 250 per ml. of poi)		
1	4.7	20
2	3.9	4
3	3.5	4
4	3.5	0
5	3.3	0

The data from these studies are far too plentiful to present in full here, and can best be shown by example and in summary. Table 1 gives the data for one series of tests, using the strain Leahi 1 introduced into poi kept at room temperature and at refrigerator temperature. It will suffice to show the gradual disappearance of the tubercle bacilli from the fermenting poi, and the length of time the tubercle bacilli could be recovered from the portions of poi kept under each of the conditions of storage. All of the 13 tests performed showed very much this same pattern of gradual disappearance, with a fidelity paralleling that obtained with the studies on the intestinal pathogens.

Table 2 summarizes the results of all of the tests, showing for each test the last day upon which viable tubercle bacilli were reclaimed from the poi samples and the pH of the poi at the time these last positive samplings were made. Unfortunately for the completeness of the results with the refrigerated poi, the limitations of time and equipment forced the termination of most of the tests at the end of the fifth day's sampling. For these tests, then, it can be concluded only that the tubercle bacilli remained alive as long as five days (although in most instances they probably remained viable for a longer time). For two of the tests, however, it was possible to make daily samplings for thirteen days, and to show that organisms of the Seibert strain survived until the ninth day, and that organisms of the Leahi 1 strain survived until the eleventh day.

TABLE 2.—*Survival-time of Tubercle Bacilli in Inoculated Poi.*

TEST NO.	TEST STRAIN	NO. OF TBC. ADDED PER ML. OF POI	SURVIVAL-TIME, AND FINAL pH OF POI at room temperature		in the refrigerator	
			days	*pH*	*days*	*pH*
1	Seibert	170	3	3.5	+ 5	5.9
2	Seibert	200	3	3.5	+ 5	5.8
3	Seibert	245	3	3.6	+ 5	5.4
4	Seibert	140	—	—	9	5.4
5	Leahi 1	250	3	3.5	+ 5	4.7
6	Leahi 1	760	3	3.5	+ 5	5.8
7	Leahi 1	695	3	4.0	+ 5	5.7
8	Leahi 1	260	3	3.4	+ 5	5.3
9	Leahi 1	40	—	—	11	5.0
10	Leahi 2	390	3	3.8	+ 5	5.9
11	Leahi 2	360	3	3.5	+ 5	5.7
12	Leahi 2	165	3	3.8	+ 5	5.7
13	Leahi 2	195	3	3.2	+ 5	5.5

+ = more than 5 days.
— = not done.

These results show that (1) in poi stored at room temperature, when there is rapid growth of the normal microbial flora of the poi, with rapid fermentation and rapid elaboration of growth products of this microbial flora, the tubercle bacilli survived for only three days after their introduction into the poi, even when they had been introduced in considerable numbers; and (2), on the other hand, in the refrigerated poi, where fermentation was inhibited and metabolic changes were not so pronounced, the tubercle bacilli were able to survive until the ninth and the eleventh day after inoculation. Under both conditions of storage, it is evident, there is not an immediate destruction but rather a gradual decline in the number of viable tubercle bacilli recoverable from the poi, until eventually no more tubercle bacilli can be reclaimed.

These observations would indicate, then, that poi, in the event that it should become contaminated with virulent tubercle bacilli at the time it is prepared, might retain some of these pathogens in a viable state for as long as the poi is likely to remain in the home (it is usually eaten within two or three days after it is purchased and mixed). As was the case with the pathogenic intestinal bacilli, the refrigerated poi, probably because it is slowed in its normal fermentation, harbors the viable pathogens for a longer time than does the poi stored at room temperature. Here again, sour poi is the safer poi to eat, and the sooner it gets sour the better it will be for the consumer—at least as far as its content of potential pathogens is concerned.

These observations also imply one further very significant fact: that something is present in the poi which achieves the destruction of the tubercle bacilli. This factor is not merely a negative one, such as the absence of proper nutriment for the tubercle bacilli, for sterile poi is able to support excellent growth of tubercle bacilli, and in this laboratory, in other investigations to be reported in a subsequent paper in this journal, it has been employed as the basis of a very satisfactory medium for the initial isolation and cultivation of virulent tubercle bacilli. Studies are being made now to determine whether, in the natural flora of poi, any microorganisms are present which produce effective antibiotics against the tubercle bacilli.

Summary

Tubercle bacilli, even when introduced into poi in small numbers, remain viable in mixed poi for as long as eleven days if the poi is refrigerated, but only for about three days if the poi is kept at room temperature. Once again it is shown that the more sour poi is—and the sooner it gets sour—the safer it will be to eat.

Acknowledgments

We should like to acknowledge with thanks the cooperation of the Waimea Poi Mill, Honolulu, which generously furnished samples of poi whenever they were needed; and of Mr. Mun Fook Shinn, of the Laboratory at Leahi Hospital, and Dr. Max Levine, Territorial Department of Health, for assistance and encouraging interest in these studies.

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A Survey of Honolulu Restaurants for the Presence of Enteric Pathogens in Poi

Studies in the Bacteriology of Poi, III*

EDWIN T. ICHIRIU, B.A., M.S., AND O. A. BUSHNELL, B.S., M.S., Ph.D.
HONOLULU

EARLIER studies in this laboratory[1] have shown that, in the laboratory at least, the enteric pathogens, such as the Salmonellas and Shigellas, survive for as long as eight days in poi stored at refrigerator temperature, and for about three days in poi allowed to sour at room temperature. The number of cases of enteric diseases occurring annually in Honolulu suggested the need for examining poi served in some of the restaurants in Honolulu, in order to ascertain whether or not poi is a likely vector in the transmission of the infecting organisms.

Methods

During the course of a year, 141 samples of refrigerated mixed poi were collected from different restaurants in Honolulu. Portions of about 3 grams each were removed from the poi containers with sterile applicator sticks and were placed immediately in tubes of tetrathionate enrichment broth. The tubes were incubated at 37 C. for twenty to twenty-four hours, after which a loopful of each enrichment culture was streaked upon an SS agar plate. The streaked plates, in turn, were incubated at 37 C. for twenty-four hours. If, after this, suspect colonies of possible pathogens were apparent on the plates, they were transferred into slants of Kligler's iron agar medium. These inoculated slants were then incubated for twenty-four hours at 37 C.

Those cultures in Kligler's iron agar which showed suspect reactions—the development of an acid butt with an alkaline slant, with or without the formation of gas or of hydrogen sulfide—were subjected to further tests. They were first purified (by restreaking on SS agar plates and re-isolating into Kligler's iron agar slants), and then the purified cultures were tested for their ability to produce urease. Those cultures which did produce urease were discarded as being members of the genus Proteus. Organisms which did not produce urease were subjected to fermentation tests, using the carbohydrates dextrose, lactose, sucrose, and mannitol to determine the possibility of their being Salmonella or Shigella species.

Results and Discussion

No enteric pathogens, at least of those species of Salmonella and Shigella which could be recovered and recognized by these methods, were isolated from any of the 141 samples of poi which were studied, although coliform organisms, paracolon bacilli, and Proteus species were nearly always present—along with a great number of other saprophytic microorganisms, of course.

These results do nothing to detract from the possibility that poi, like many other foodstuffs, can serve as a vector in the dissemination of disease-producing organisms, but they do show that Honolulans who eat in public places appear to be reasonably safe from gastrointestinal infections transmitted by the agency of poi.

* This investigation was supported in part by a research grant from the Division of Research Grants and Fellowships of the National Institutes of Health, U. S. Public Health Service.

[1] Fung, George, and Bushnell, O. A.: The Possible Role of Poi in the Epidemiology of Infectious Intestinal Diseases, HAWAII MED. J. 7:296 (Mar.-Apr.) 1948.

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A Home Made Multiple Lead Electrocardiograph Switch

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HONOLULU

FOR THE past year, the electrocardiography department at The Queen's Hospital has taken routinely the following nine leads: the three standard limb leads, the three augmented unipolar limb leads of Goldberger[1], and precordial leads from three of the six standard positions using the central terminal of Wilson[2] as the indifferent electrode. More exploratory (precordial) leads are taken as warranted by each case. This is in conformity with the majority of cardiology centers on the mainland. These leads can easily be taken on the older type of electrocardiograph machine having a switch for only the three standard leads, by manipulation of a simple three-wire connector.[3]

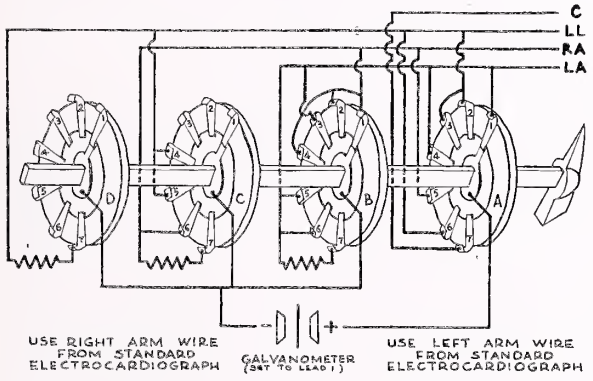


FIG. 1.—Diagrammatic detail of construction of switch.

This is based on a clear understanding of the connections involved, and is excellent practice. However, to facilitate the technician's job so that she could routinely take all these leads, a switch with all connections built in was devised. A review of the literature revealed an article[4] describing a switch built along identical lines. Our switches have only seven positions. The connections are necessarily different because of a different choice of leads, and are as diagrammed:

SWITCH	TO ECG GALVANOMETER POLE							
D	—							LL*
C	—				LL	LL	RA	RA*
B	—	RA	RA	LA	RA	LA	LA	LA*
A	+	LL	LL	LL	LA	RA	LL	C
Switch position		1	2	3	4	5	6	7
Leads resulting		I	II	III	aVL	aVR	aVF	V

LA, left arm.
RA, right arm.
LL, left leg.
C, precordial exploring electrode.
*, with 5000 ohms resistor.

Any number of leads can be built in, limited only by the number of positions on the switches. Inspection of our switch-box is invited.

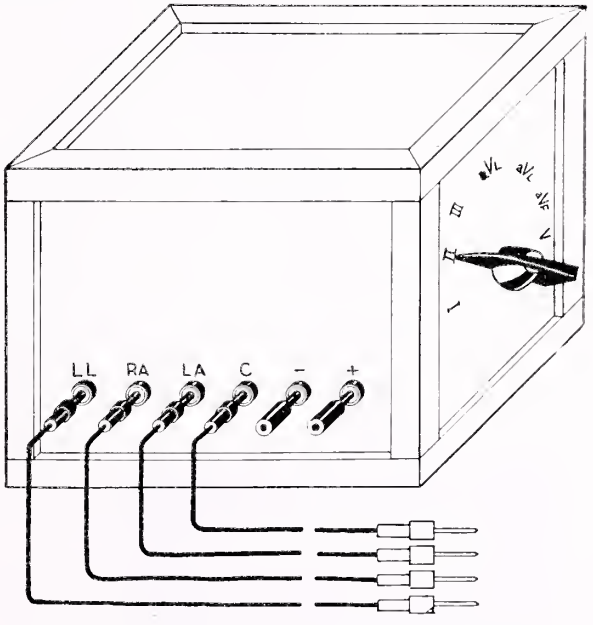


FIG. 2.—External appearance of actual switch box, showing lead terminals and selector switch.

The author is indebted to Dr. Fred Lam, Jr., who aided with his knowledge of radio by describing available types of switches.

The Queen's Hospital.

[1] Goldberger, E.: The aVl, aVr, and aVf Leads, a Simplification of Standard Lead Electrocardiography, Am. Ht. J. 24:378 (Sept.) 1942.

[2] Wilson, F. N., Johnston, F. D., McLeod, A. G., and Barker, P. S.: Electrocardiograms that Represent the Potential Variations of a Single Electrode, Am. Ht. J. 9:447 (April) 1934.

[3] Goldberger, E.: A Simple Indifferent Electrocardiographic Electrode of Sero Potential and a Technique of Obtaining Augmented, Unipolar, Extremity Leads, Am. Ht. J. 23:483 (April) 1942.

[4] Ethridge, C. B., and Stolar, M. H.: A Simple Switching Device to Facilitate the Recording of Electrocardiograms Embodying Multiple Types of Leads, Am. Ht. J. 29:733 (June) 1945.



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[EDITORIALS]

JOIN THE A.M.A.!

The House of Delegates and the Board of Trustees of the American Medical Association took action at the recent interim meeting which makes membership in the Association contingent upon payment of $25 annual dues. Such payment, and such membership, are optional with members of constituent state and county medical societies. They may remain members of these organizations alone, or they may pay the $25 additional tariff and be members of the American Medical Association as well. No longer, as in the past, will their county society membership automatically confer upon them membership in the A.M.A.

Fellowship in the American Medical Association, which is a requirement for participation in either the scientific programs or business affairs of the national organization, will no longer require the mere payment of fellowship dues in exchange for the *Journal*. Such payments, from now on, will merely make one a subscriber. Fellowship will be contingent upon (1) membership in the county and state organizations, (2) membership (at $25 per year) in the A.M.A., and (3) application for fellowship and payment of fellowship dues.

Why should you join the A.M.A.? Well, you should join it if you have any idea of participating in the scientific program—presenting or discussing a paper—at any annual A.M.A. meeting. You should join it if you want to be a delegate or other officer of the A.M.A.—or, presumably, if you care to vote for a local candidate for the office of delegate, since presumably only members are entitled to be represented at A.M.A. meetings. If your membership lapses for non-payment of dues you will have to pay up all your back dues when you finally reinstate yourself, in order to attend any annual meeting of the A.M.A.

But there's another reason that applies to everyone: the need to present a united front, representative of us all, in the national discussions of voluntary versus socialized medical care plans, and the need to demonstrate to the people of the United States that we are not members of the A.M.A. merely because we "have" to belong to our county societies, but because we *believe* in the A.M.A. and *want* to belong to it. If you don't like what its spokesmen say or do, get up on your hind legs and say so; that's your privilege, and your duty. But when you get that bill for $25, pay it! Join up! If we don't hang together, there's a damned good chance of our hanging separately.

MASTECTOMY IS HARD TO TAKE

Hugh Cabot once remarked, to an auditorium full of doctors, "Cystoscopy was accomplished with very little discomfort—to the operator!" It got a laugh—too big a laugh. A good many of those who chuckled over it might better have reflected on the number of times they had been guilty of the attitude of mind Dr. Cabot was talking about. The assumption that anything necessary for the diagnosis and cure of a patient's disease can and should be carried out regardless of the patient's feelings is usually erroneous and sometimes constitutes a really serious drawback to his or her recovery.

Mastectomy, simple or radical, is one procedure in which it seems likely that this error is committed more widely, and with more serious consequences, and with less realization of those consequences on the part of the doctor, than in almost any other single procedure in either medicine or surgery. A recent case of this has pointed the subject up so sharply that it appears desirable to remind the profession of the existence of this possibility for doing harm. Briefly, a woman was told in only general terms of the extent of the radical operation and the discomfort and disability it would be likely to entail, and she was advised that a few weeks, more or less, would see her virtually fully recovered. The jolt she received on learning of the extent of the operation and the amount of disability, aggravated by her fear that she had not been cured when she was still not entirely "well" after a year, combined to create a compulsion neurosis in her. For more than an additional year, she has been unable to attend for any length of time to any subject except cancer in general and cancer of the breast in particular. Her voluminous readings and correspondence on this subject have revealed some interesting facts regarding it.

It appears that a great many women undergo extremely severe emotional trauma, not alone because of the mutilation of the operation, but because they were not prepared for it; not alone because of the discomfort of the post-operative period, but because they were not warned to expect it; not alone because of the prolonged period of convalescence, but because they were never told how long it was apt to be. The excellence of the intentions, in many if not most of these instances of omission, is not impugned for a moment; but good intentions aren't enough in themselves to justify these consequences. It is said, for example, that over-much frankness might frighten some women into refusing surgery. Well, perhaps it is debatable, whether it is proper to induce a patient to submit to operation by falsifying the nature of the procedure. Moreover, doesn't this circumstance merely require a little more tact and persuasiveness on the doctor's part, rather than just a little less honesty? It is said, too, that needless fears may be engendered by painting an unnecessarily dark picture of the future. Here again, however, it seems kinder to expose the patient to a good chance of a better-than-expected outcome, rather than to a good chance of an unexpectedly unpleasant one. Surely the patient is entitled to know what she is being let in for; her emotional reaction to the post-operative pain and discomfort will be ten times better if she is prepared for it instead of astonished and terrified by it. If the Christian Scientists haven't wholly convinced us of the importance of emotions in relation to the appreciation of pain, prefrontal lobotomy should have done so.

Perhaps we are doing women something of an injustice in some instances. Perhaps they can steel themselves to the prospect of disfigurement and pain better than we think they can. Perhaps they'll be better off for a little more frankness and downright honesty about radical mastectomy than they have—in some instances at least—been getting. Mastectomy is no cinch—and maybe the patient would be better off for knowing it in advance.

HAWAII—U.S.A.'S STATISTICAL ORPHAN

When states are compared with one another in respect to maternal mortality, or medical practice acts, or what not, it seems to be customary not to mention the territories. Not infrequently, as in an analysis of maternal mortality in the *Journal of the American Medical Association* for October 1, 1949, the District of Columbia is mentioned; but as a rule, Hawaii and Alaska and Puerto Rico are left out in the cold. Hawaii's record for maternal mortality happens to be pretty good—better than that of three-fifths of the states, and slightly better than that of the U.S. as a whole[1]—and we'd be happy to have the fact known. If it hadn't been good, moreover, publishing the fact might have proved a useful stimulus to get us to improve.

There are over half a million people in Hawaii, and somewhat less than half a thousand doctors; and we'd like to be right in there between Georgia and Idaho when the records of the states—of which we hope to become one, before long—are being publicized. We think we'll be a credit to the Union most of the time, and if we're not, we'll want to be doing something about it.

SALMONELLOSIS HAWAIIENSIS

Hawaiian Salmonellas are the same as those on the mainland, but many of them get a rather different reception here, because most residents of Hawaii have had triple typhoid vaccine. It appears from Levine's report in this issue of the JOURNAL that this vaccine protects not only against the three Salmonellas it is made from—typhi and the two paratyphi — but also, to some extent, against S. typhimurium and perhaps some others as well. It is suggested that, because of this it might be worth while to advance routine triple typhoid vaccination to a somewhat earlier age than 3 years, in order to give younger children the

[1] Boog, J. M.: Maternal Mortality in Hawaii, HAWAII MED. J. 8:267 (Mar.-Apr.) 1949.

benefit of protection against some of the other Salmonellas which now harass them with disproportionate frequency.

Levine also points out that the vaccine as now constituted seems to offer little or no protection against the Group C Salmonellas, one member of which—S. montevideo—is the chief offender in outbreaks of food-poisoning in Hawaii. He suggests that it might be advisable to incorporate S. montevideo or some other Group C Salmonella into the vaccine, in order to broaden its scope of protection for vaccinated persons.

These are constructive suggestions, which should be given serious consideration by the Board of Health and the Honolulu Pediatric Society in particular. A stitch in time is worth a pound in the bush, as the old adages have it.

NOTE: Since this went to press, the Board of Health has officially recommended advancing the age of TAB vaccination from 3 years to the second half of the first year.

ALLERGY, THE COLLAGEN DISEASES AND THE ADRENO-CORTICAL HORMONES

There is greatly increasing interest in the broader aspects of allergy and rather widespread acceptance of the thesis that there is a sensitivity basis not only for rheumatic fever but also for glomerulonephritis and rheumatoid arthritis.

Another group of conditions linked by anatomical, experimental and clinical studies to hypersensitivity phenomena are the so-called collagen diseases. These include disseminated lupus erythematosus, scleroderma, dermatomyositis, and periarteritis nodosa. Pathologically, they are linked by a recognizable alteration of collagen fibers (fibrinoid degeneration) and by vascular participation. The tissues involved in all are mesenchymal in origin and since these tissues are concerned with protection or defense, it is logical to link them with the process of sensitization or allergy (which is mere alteration of the defense mechanism). The increase in gamma globulin in all these conditions further supports this thesis.

Perhaps we are coming closer to an understanding of these diseases in the newer work on adrenocortical and adrenocorticotropic hormones. Certainly this work offers new therapeutic hope in a group of conditions which are often difficult, if not impossible, to treat satisfactorily.

The adrenocorticotropic hormone of the pituitary gland has been designated as ACTH. It has been found to have therapeutic effectiveness similar to Compound E.

Compound E is one of a number of steroids isolated from the adrenal cortex by Kendall.[1] These steroids are chemically related to cholesterol, to ovarian and testicular hormones, to tocopherol and calciferol, and to other substances. Four of the best known of them are corticosterone, dihydrocorticosterone, progesterone, and Compound E or cortisone. The first two have major physiologic effects upon electrolyte balance. Progesterone is an androgenic hormone. Compound E has effect upon muscle activity and resistance to cold, trauma and toxins. It (and others) also influence glucose metabolism.

Dihydrocorticosterone was synthesized and has been used effectively in the treatment of Addison's disease during the last ten years. Compound E has been partially synthesized from bile acids very recently. Because of its spectacular therapeutic effectiveness in a number of conditions, its production from simple compounds in much greater volume at considerably lower cost is the present challenge to the American drug industry. The present limited supply is under control of a central committee similar to that which distributed penicillin and streptomycin in the early days of their trial runs.

The first clinical reports by Dr. Hench *et al*,[2] of the Mayo Clinic in the use of Compound E (and ACTH) in rheumatoid arthritis and in acute rheumatic fever were, indeed, spectacular. All symptoms and signs of activity, including sedimentation rate, subsided within a few days. Electrocardiographic changes reverted to normal in acute rheumatic carditis. The return of a feeling of wellbeing and cheerful mental outlook indicated a metabolic effect more profound than pure psychic relief from diminution in pain and disability. Unfortunately, the majority of severe cases relapse shortly after interruption of therapy and long continued treatment has not been possible. Milder cases had longer duration of effects, as reported by Boland and Headley.[3]

Similar spectacular results have been reported with the use of ACTH in severe serum sickness, drug reactions and asthma.[4] Disseminated lupus erythematosus has responded and gout has been favorably influenced.

Unfavorable reactions are to be expected with hormonal substances of such potency. They have

[1] Kendall, Edward C.: The Adrenal Cortex, Arch. Path. 32:474 (Sept.) 1941.

[2] Hench, P. S., et al: The Effect of a Hormone of the Adrenal Cortex (17- hydroxy-11-dehydrocorticosterone: Compound E) and of Pituitary Adrenocorticotropic Hormone on Rheumatoid Arthritis; Preliminary Report, Proc. Staff Meet., Mayo Clin. 24:181 (Apr. 13) 1949. Hench, P. S., et al: The Effects of the Adrenal Cortical Hormone 17-hydroxy-11-dehydrocorticosterone (Compound E) on the Acute Phase of Rheumatic Fever; Preliminary Report, ibid 24:277 (May 25) 1949.

[3] Boland, Edward A., and Headley, H. E.: Effects of Cortisone Acetate in Rheumatoid Arthritis, J.A.M.A. 141:301 (Oct. 1) 1949.

[4] Bordley, John E., et al: Preliminary Observation on the Effect of Adrenocorticotropic Hormone ACTH in Allergic Disease, Bull. Johns Hopkins Hosp. 85:396 (Nov.) 1949.

not been frequently encountered. Masculinization, skin and other changes similar to Cushing's syndrome, hypertension, disturbances in glucose metabolism have been reported. So far these have been reversible, but periods of application of the drug have been short due to limited supply. We will have to know more about the potential dangers from these drugs before they may be given widespread distribution. The therapeutic vista opened up by their discovery is a broad one and we are all eagerly awaiting participation in another marvelous medical advance of the century.

S. E. DOOLITTLE, M.D.

SYSTEMIC LUPUS ERYTHEMATOSUS

The adjective "disseminated"—long employed to designate the variety of lupus erythematosus characterized not alone by skin lesions, but by weakness, fever, arthralgia, rapid sedimentation rate, and frequently leucopenia, glomerulonephritis, polyserositis, and a variety of laboratory findings which appear to depend upon reticuloendothelial dysfunction in general and hepatic dysfunction in particular, with an eventually fatal outcome in most cases—has been productive of a great deal of confusion. It has always been necessary to explain that it does not mean merely "widespread" in any instance, and that it sometimes does not have this connotation at all, since skin lesions may be entirely absent. What it really means is "involving one or more organs or structures other than (or in addition to) the skin."

Recognition of the ineptness of this term has recently led to the substitution for it, by J. Martin Beare[1] at the suggestion of W. N. Goldsmith, of the word "malignant." This conveys well enough the implication of a fatal outcome, but it is not wholly satisfactory either, because a purely cutaneous, discoid case may manifest such unsightly skin lesions as to amply justify this name; and moreover, a "disseminated" case may exceptionally be a remarkably chronic and benign affair.

It would seem highly desirable to make a change, and, since a move has been made to make what appears to be an undesirable change, an alternative one is suggested, namely, the adjective "systemic." This conveys precisely what is meant, namely, that the disease is not merely cutaneous in its extent, but that it involves internal viscera —spleen, liver, kidneys, bone marrow, or what not—as well. H.L.A.

[1] Beare, J. M.: Malignant Lupus Erythematosus, Brit. J. Derm. & Syph. 61:233 (July) 1949.

MEDICAL NEWS

Podophyllin, a familiar treatment for condyloma acuminatum and various other warts, has been used successfully to treat **cutaneous carcinoma** at the Johns Hopkins Hospital. Topical application of the resin as a 25 per cent suspension in mineral oil, or a 20 per cent solution in alcohol, resulted in cure of every one of 25 cutaneous cancers treated. About 10 to 20 applications within 3 weeks are required. Sloughing of the necrotized tumor and healing took an average of 49 days. (Sullivan, M., *Bull. Johns Hopkins Hosp.* 85:200 [Sept.] 1949.)

* * *

Paritol, a synthetic heparin-like **anticoagulant,** holds great promise. It is a polymer of mannuronic acid derived from seaweed (kelp) by the Wyeth laboratories. Dosage is about ten times that of heparin by weight, but the action is just as prompt, and twice as long. Unlike dicumarol, heparin is prompt in action and easy to control, but at present heparin costs 113 times as much as dicumarol, milligram for milligram. A cheap synthetic heparin would fill a real need.

* * *

Success at last with **fat emulsions** given **intravenously:** Shafiroff *et al* have given fat emulsions (5 to 20 per cent) to over 100 surgical patients with a very low incidence of toxic reactions (2 per cent, mostly transient fever). The emulsion is made by blending coconut oil, amigen, and glucose with Knox P-20 gelatin as the stabilizing agent, to yield a mixture containing 10 per cent fat, 5 per cent glucose, and 5 per cent protein hydrolysate. Each liter of this infusion contains 1300 calories.

Use of the infusion converted many patients from a negative to a positive nitrogen balance. Addition of deuterized fat gave additional evidence that the fat was metabolized. No evidence of fat embolism or fatty infiltration of any organ could be found (by roentgenogram, blood tests and biopsies during the various abdominal operations).

The infusion is regarded as safe enough for general use and may soon be marketed. (Shafiroff, B. G. P., et al, *S.G.O.* 89:398 [Oct.] 1949.)

* * *

Ultrarapid blood transfusions to combat shock are recommended by Brunschwig and associates (Pierce, Robbins and Brunschwig, *S.G.O.* 89:442 [Oct.] 1949). Oxygen pressure is used to force the blood at high speed into the patient's collapsed veins. They report giving as much as 1700 cc. of blood in seven minutes to a patient in collapse from hemorrhage during a laparotomy. No evidence of hepatic damage or "citrate intoxication" was found, and the procedure seemed to be lifesaving in several instances. The apparatus is simple and can be easily put together in any hospital.

* * *

A new use for **tetraethylammonium chloride** (Etamon): relief of intractable **chest pain.** The drug was given intravenously to 40 patients with a variety of conditions producing chest pain: trauma, pneumonia, pleuritis, tuberculosis, neoplasm, mediastinal emphysema, myocardial infarction, and pulmonary infarction. Relief occurred in all, and was complete in 60 per cent. The recommended dosage is 3 mg. per kilo of body weight.

Mode of action is thought to be a chemical ganglionic block of the sensory nerves in the chest wall which transmit painful stimuli from the irritated parietal pleura.

Chief usefulness of Etamon in such cases will be where codeine and demerol fail to relieve pain, and where one would like to avoid cough suppression and the likelihood of atelectasis which go with morphine.

C. A. Domzalski, Jr., M.D.

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RECENT ACQUISITIONS

Dentistry

American Dental Association. *Dental caries.* 2nd ed. 1941. (from Dental Society.)

A.A.A.S. *Dental caries and fluorine.* c1946. (from Dental Society.)

Comroe, B. I. *Internal medicine in dental practice.* 3rd ed. rev. c1949. (from Dental Society.)

Ellis, R. G. *The classification and treatment of injuries to the teeth of children.* c1946. (from Dental Society.)

Ennis, L. M. *Dental roentgenology.* 4th ed. rev. c1949. (from Dental Society.)

Goldman, H. M. *Periodontia.* 2nd ed. c1949. (from Dental Society.)

Hill T. J. *A textbook of oral pathology.* 4th ed. rev. c1949. (from Dental Society.)

Horner, H. H. *Dental education today.* c1947. (from Dental Society.)

McGehee, W. H. O. *Dental practice management.* c1944. (from Dental Society.)

Massler, Maury. *Atlas of the mouth and adjacent parts in health and disease.* c1948. (from Dental Society.)

Mead, S. V. *Oral surgery.* 3rd ed. c1946. (from Dental Society.)

Mustermann, H. W. *Principles and practice of x-ray technic and interpretation.* c1945. (from Dental Society.)

Nevin, Mendel. *Conduction, infiltration and general anesthesia in dentistry.* 5th ed. rev. c1948. (from Dental Society.)

Thoma, K. H. *Oral and dental diagnosis.* 3rd ed. c1949. (from Dental Society.)

Thoma, K. H. *Oral surgery.* 2v. c1948. (from Dental Society.)

Wheeler, R. C. *Textbook of dental anatomy and physiology.* c1940. (from Dental Society.)

Nursing

Jensen, Julius. *Nursing in clinical medicine.* 3rd ed. c1949. (from Nurses' Association.)

Obstetrics and Gynecology

Brady, Leo. *Essentials of gynecology.* 2nd ed. c1949. (from Nurses' Association.)

Faulkner, R. L. *Essentials of obstetrical and gynecological pathology.* 2nd ed. c1949. (gift of publisher.)

Miscellaneous

Cole, W. H., ed. *Operative technic in specialty surgery.* c1949. (gift of publisher.)

International Poliomyelitis Congress. *Poliomyelitis.* c1949. (gift of National Foundation for Infantile Paralysis.)

Keffer, Luiza. *Indice bibliografico da lepra.* v.2-3. c1946-48.

Luck, J. M., ed. *Annual review of biochemistry.* v.17-18. c1948-49.

Mettler, F. A. *Neuroanatomy.* 2nd ed. c1948. (gift of publisher.)

Quarterly cumulative index medicus. v.43. Jan.-June 1948.

Rynearson, E. H. *Obesity.* c1949. (gift of publisher.)

Speed, J. S., ed. *Campbell's operative orthopedics.* 2v. 2nd ed. c1949. (gift of publisher.)

Youmans, J. B., ed. *Medicine of the year, 1949.* c1949. (gift of Hawaii Territorial Medical Association.)

* * *

The Library wishes to acknowledge with thanks a check from the Honolulu Obstetrical and Gynecological Society to cover a year's subscription to *Obstetrical and Gynecological Survey.* Other specialty groups have also indicated their favorable reaction to requests made to them by the Library for help in building up the collection in their own particular fields.

* * *

An article entitled "Plantation Medicine in Hawaii" by **Dr. William B. Patterson** appeared in the October issue of *Industrial Medicine and Surgery.* **Dr. Wayne W. Wong** also received some nice publicity on the mainland from his article "Personality Patterns in Ocular Discomfort" in the October issue of the *Archives of Ophthalmology.* An article on "Removal of Saddle Embolus of the Aorta" by **Drs. A. S. Hartwell** and **C. M. Burgess** was published in the *J. A. M. A.*, October 8, 1949.

* * *

We wish to remind all doctors who have not already sent in a list of films in their private collections to please do so as soon as possible. A catalog is being prepared, arranged by subject, and, if we can have all information needed to complete it, should prove a most useful reference tool for visual educational purposes.

BOOK REVIEWS

Psychosomatic Medicine — The Clinical Application of Psychopathology to General Medical Problems. By Edward Weiss, M.D. Second edition. 803 pp. W. B. Saunders Company, Philadelphia and London, 1949. Price $9.50.

Prolixity and psychiatry seem to be inseparable, which is probably due to the fact that the poor men who have to practice psychiatry are never allowed (as they no doubt would love) to tell their patients in just so many words that "you are a drunk," or a "moron," or a "simple damfool," as the case may be. No indeed; euphemism and circumlocution are absolutely necessary. Plain talking would alienate patients and defeat therapy.

So perhaps psychiatrists cannot be censured when they write the way they talk. But neither should the psychiatrist blame his readers if they react to his prose as if it were intravenous pentothal.

Which is all by way of saying that verbosity is the chief defect of this book. It runs to 757 pages of rather small type. The chief redeeming feature is an honest discussion of what psychotherapy consists of: giving the patient "insight" (i.e. talking around the subject, closer and closer to the truth, until the patient finally realizes that he is a louse, a coward, or other variety of vermin).

Once the patient realizes what he is (i.e. has made of himself) the thought of it so embarrasses him that he can no longer face the doctor with his complaints, and he fails to return. What more can a harried psychiatrist ask?

Addendum: Actually the book is excellent, for a psychiatric text. I was able to stay awake 97 consecutive minutes with it.

C. A. DOMZALSKI, JR., M.D.

Clinical Diagnosis by Laboratory Examinations. By John A. Kolmer, M.S., M.D., Dr.P.H., Sc.D., LL.D., L.H.D., F.A.C.P. Second edition. 1212 pp. Appleton-Century-Crofts, Inc., New York, 1949. Price $12.00.

The astounding thing about this second edition of a valuable compilation is the fact that it contains fewer pages than did the revised first edition. That, in spite of the fact that, between 1944 and 1949 laboratory medicine has probably made more progress and added more new things than in any other field of medicine excluding only therapeusis. That means either that the pruning shears have been used avidly or that the paste pot has been sadly neglected. After more than a cursory reading, I am afraid it is the latter.

The book, as its predecessors, like Gaul, is divided into three parts: (1) Clinical interpretations; (2) Applications of laboratory examinations; and (3) Technic of examinations. To me this arrangement seems very awkward and confusing. It is a book highly to be recommended to clinicians, both medical and surgical, for coherent reading, for it will give them a good idea of what the many laboratory tests they order really mean. But it is not to be recommended as a reference book in which to look up simply and easily information on a given subject. For example, if you are interested in hepatic dysfunction, you will find in Chapter 8, functions of the liver, clinical value of liver function tests, choice of function tests, methods of conducting them (from the clinician's point of view), functions of bile and gallbladder, collection of bile and examinations of bile. Then you will have to jump to Chapter 26 to find under diseases of the liver and biliary tract such subjects as jaundice, three kinds of hepatitis, cholangitis, acute yellow atrophy, cirrhoses, cholecystitis, amyloidosis and parasitic diseases. The technic of the tests mentioned are scattered far and wide in the third part of the book, and are to be located only through the index, and are not too modern.

This is a book certainly *not* to be recommended to technicians unless they be overly ambitious; the section on technic apparently was included only for the clinician who is overly curious.

Every clinician, medical or surgical, should have a copy of this very useful book, but if you have a copy of the first edition, I do not believe the few changes would justify the purchase of the second edition. The remarks on prothrombin have been amplified and both the one and two stage tests appear in the technical section. But I could not find the word "dicumarol" anywhere in the book.

The two split sections on leprosy are lousy and so old fashioned that they do not even mention "Hansen's Disease." It mentions a "primary lesion" in leprosy and places great faith in nasal mucosal smears.

Most clinical pathologists like the book; it flatters them; it tells them what they already know.

E. A. FENNEL, M.D.

Nutrition and Diet in Health and Disease. By James S. McLester, M.D. 5th edition. 800 pp. W. B. Saunders Company, Philadelphia and London, 1949. Price $9.00.

McLester presents in brief and readable form many of the basic facts of nutrition in health and disease. A good feature is his description of normal nutrition with which to compare his later treatment of subclinical and clinical deficiency states. He treats such diverse subjects as: digestion and absorption; personal idiosyncracies; the cost of food; the composition of seaturtle eggs or salt duck eggs; menus for box lunches; menus for the patient with gout or a febrile disease. On the whole he tends to be conservative.

For all his discussion of the cost of food and its relationship to the ability to obtain an adequate diet, McLester's menus are anything but moderate in cost. They are rather elaborate, much more suitable to a hospital than to use in the average home. The same nutritive intake can be planned in a much simpler way. Another disadvantage in Hawaii is that none of the excellent foods characteristic of the various racial groups in Hawaii, are included. This, of course, is natural but the fact should be considered in adapting McLester's diets for use here.

On the whole, McLester does a masterly job and this latest edition should prove very useful to those dealing with the many medical manifestations of food and nutrition.

MARJORIE ABEL, M.S.

Geriatric Medicine—The Care of the Aging and the Aged. Edited by Edward J. Stieglitz, M.S., M.D., F.A.C.P. Second edition. 773 pp. with 180 figures. W. B. Saunders Company, Philadelphia and London, 1949. Price $12.00.

Geriatric medicine is not a separate specialty, but that part of every physician's practice which deals with patients past forty. Not that everyone past forty is senile, but involutional changes generally begin to make their insidious accumulation felt at or about this age.

This is the second edition of a book which in 1943 was practically a lone pioneer in this vast new field of medicine. The size of the problem can be judged from the fact that we have only 1 million diabetics in this country, but we have 10 million people aged 65 or more. Yet we know 10 times more about diabetes than we do about old age.

The medical knowledge that does exist about aging people is thoroughly covered by 47 contributing authors, gently edited by the country's foremost authority on geriatrics, Edward Steiglitz.

The material is logically arranged, and handled clearly with a minimum of theoretical hocus-pocus. Emphasis is on practical management.

This book should take its place as one of the fundamental texts within reach of every doctor, along with manuals of surgery, and texts on medicine, obstetrics and pediatrics.

C. A. DOMZALSKI, JR., M.D.

Clinical Ausculation of the Heart. By Samuel A. Levine, M.D. and W. Proctor Harvey, M.D. 327 pp. with 286 figures. W. B. Saunders Company, Philadelphia and London, 1949. Price $6.50.

Dr. Levine has written another excellent book. A lifetime of study, observations and research is packed in this small volume. In this day of expensive laboratory tests and gadgets Dr. Levine shows how much information can be obtained with one of the oldest clinical instruments. If used carefully, intelligently, and not perfunctorily, the stethoscope will yield a lot for a few cents.

Patients, however, these days are not impressed unless subjected to a battery of x-rays and electrocardiograms. The book is illustrated profusely with phonocardiograms, which increase the reader-interest greatly.

The only criticism is the inclusion of brief paragraphs on treatment, which might better be left to other textbooks. The book is recommended for all to read, if only to remove a few cobwebs.

JOHN BELL, M.D.

Operative Technic in Specialty Surgery. By Warren H. Cole, M.D., F.A.C.S. Pp. 725. Price $14.00. Appleton-Century-Crofts, Inc., New York, 1949.

This treatise is a logical companion book to "Operative Technic in General Surgery," previously reviewed in these columns.

Again, Dr. Cole has assembled the writings of twenty-one authors, each recording his experience in the surgical approach to a particular region or specialty.

Contributing authors have been well chosen. As in the previous volume, this book does not contain the space-taking antiquated information and illustrations of operative procedures long since abandoned. Each author clearly describes technical maneuvers with which he has had experience, and which he can consequently justly recommend.

I highly recommend this volume to anyone interested in the surgical specialties included in it.

V. C. WAITE, M.D.

Neuroanatomy. By Dr. Fred A. Mettler, A.M., M.D., Ph.D. 536 pp. with 357 illustrations including 33 in color. Second Edition. Price $10.00. The C. V. Mosby Company, St. Louis, 1948.

This book is written for the medical student but is highly valuable for the clinician and postgraduate student as well. The subject is presented masterfully with nebulous facts minimized, yet comprehensive, systematic and plainly descriptive. It is beautifully illustrated with three-dimensional drawings, diagrams and excellent color plates. The first half of the book concerns macroscopic and the latter half microscopic anatomy, as well as correlation of both. Recent advances from clinico-anatomical studies carried out on patients following prefrontal lobotomy are presented. Adequate attention is devoted to the extrapyramidal system. Cytoarchitectonics is appropriately and briefly presented in the last chapter. Phylogenetic and comparative anatomical studies are included. As in most texts of anatomy of the nervous system, the rubrospinal tracts of the human are given considerable attention, despite the fact that no one has ever demonstrated such a tract in man either clinically or anatomically. It would seem timely, diplomatic circles concurring, to purge the human rubrospinal system from the literature until its true color is known.

This book is a worthy contribution and does much to dissipate the darkness enveloping neuroanatomy.

THOMAS S. BENNETT, M.D.

Essentials of Obstetrical and Gynecological Pathology. By Robert L. Faulkner, M.D., F.A.C.S. and Marion Douglass, M.D. Second Edition, 357 pp. with 300 illustrations, including 3 color plates. Price $8.75. C. V. Mosby Company, St. Louis, 1949.

The book, according to the preface, was written especially for use by students as a relatively simple unadorned text for classroom work. The general substance of the text is interesting reading, in which the objectionable loose coinage of terms found in Novak's book is overcome. Nevertheless, the quality of the book is marred by about 50, of the some 300 illustrations, which are either fuzzy or washed out. The photomicrographic subjects are generally better than the gross, but it is doubted if many of the illustrations would be of much value to the novice and the student.

SUMNER PRICE, M.D.

The Practice of Refraction. By Sir Stewart Duke-Elder, K.G.V.O., M.A., D.Sc., Ph.D., M.D., F.R.C.S., Hon. D.Sc. Fifth edition. 216 illustrations, 317 pp. The C. V. Mosby Company, St Louis, 1949. Price $6.25.

This book is a welcome addition to the library of the resident on ophthalmologic service and the practicing oculist. The character of the fifth edition is essentially similar to previous editions. However, much new valuable information has been added. This includes a practical discussion on the transient changes in refraction and a dissertation on the modern concept of the etiological significance and treatment of myopia.

The chapter on myopia alone, which treats this difficult subject in a modern perspective, is a welcome departure from the teachings of former authors. The mechanism of accommodation and its relation to anomalies of convergence has been treated fully and with amazing simplicity. New techniques, such as streak retinoscopy and velonoskiascopy, have been included and explained.

This book will not take the place of years of painstaking attention to the subject of refraction in the dark room but it will serve as a guide in the interpretation and practical application of the results obtained.

W. J. HOLMES, M.D.

Fundamentals of Otolaryngology—A Textbook of Ear, Nose and Throat Diseases. By Lawrence R. Boies, M.D. 443 pp. with 184 figures. W. B. Saunders Company, Philadelphia and London, 1949. Price $6.50.

This book has been written by several doctors, each an expert on the subject he discusses. It is up to date and was written as a text for the undergraduate medical student as well as to provide fundamental information for the general practitioner. It was not intended by the author as a complete reference textbook, although it is a very complete book, indeed. Its value lies in the concise way the subject is presented. The unusually large number of pictures, sketches and diagrams explain many difficult points much more clearly than the average book.

It is easy to find the essentials on any subject due to (1) an outline of each subject before the beginning of the discussion; (2) bold type for all headings; and (3) italics for essential points in the discussion.

E. R. AUSTIN, M.D.

The Surgical Clinics of North America (Mayo Clinic Number). Symposium on Traumatic Surgery. Pp. 973-1282. August issue. W. B. Saunders Co., Philadelphia, 1949. Price $15.00 a year.

This is the Mayo volume of surgical clinics and the material is selected from the vast experiences of Mayo Clinic surgeons. The individual articles are well written, as usual.

This volume is entitled, "Symposium on Traumatic Surgery." However, I was disappointed in it, since it contained only a few articles and these dealt with highly specialized phases of traumatic surgery such as might interest the otolaryngologist, neurologist, or plastic surgeon.

This disappointment was compensated by a series of informative articles on general surgery, such as "Jaundice in General Surgery," "Surgical Conditions Coincident with Pregnancy," and "Reactions to Transfusion During Operation," as well as a number of interesting reviews of case reports.

J. W. CHERRY, M.D.

Medical Clinics of North America. Massachusetts General Hospital Number. Recent Advances in Medicine. Pp. 1211 to 1498. September 1949 issue. Price $18 per clinic year. W. B. Saunders Company, West Washington Square, Philadelphia, 1949.

This issue of the *Medical Clinics* covers a lot of ground. Primarily it summarizes most of the latest literature on the various phases of thyroid disease, certain types of heart disease, pernicious anemia, and so on. There is also an article on neuro-circulatory asthenia which is quite well done.

Of particular interest to the man in general practice is the article on endocrine function which has in it several pearls of wisdom, each clearly stated in italics and each well rationalized.

Another article which should be of interest to the man doing general medicine is the one on the "dumping" syndrome. With practically all surgeons doing subtotal and total gastrectomies for various forms of ulcers, the problem of the "dumping" syndrome has naturally increased. This problem commonly, then, falls into the lap of the medical man. The etiological, diagnostic and therapeutic phases of this problem are well covered in the article by Dr. Culver. The one point which he neglected to mention in treatment was that elevation of the foot of the bed immediately after eating is frequently of value in overcoming many of the distressing symptoms of this post-gastrectomy complication.

As in most issues of the *Medical Clinics,* this one covers the ground quite adequately and will easily substitute for much of the regular journal reading which most practitioners do not have time to do thoroughly. For those men who have been following the current literature, there is nothing new in this issue.

MORTON E. BERK, M.D.

The American Nurses Dictionary—The Definition and Pronunciation of Terms in the Nursing Vocabulary. By Alice L. Price, B.S., R.N. 656 pp. W. B. Saunders Company, Philadelphia and London, 1949. Price $3.75.

Here is a book written specifically for nurses by a nurse. The author has presented the nurses' vocabulary in a most practical fashion. Its listing of words and their definition includes the vast majority of words needed by the nursing profession. The definitions are simple and clear and there are no cross-references. This book would be of particular value to the student new to the profession and would serve as a valuable supplement to their other texts.

All terms listed are phonetically respelled for pronunciation. Lengthy charts of muscles, veins, etc., have been omitted and the stress is placed on the terms most commonly encountered. As a quick and understandable reference for nurses, both students and graduates, this book should prove most valuable.

MARY ANN MIKULIC, R.N.

Ward Administration. By Margaret Randall, R.N., M.A. 326 pp. with 15 figures. W. B. Saunders Company, Philadelphia and London, 1949. Price $4.00.

This book is written primarily to aid students in ward administration courses and head nurses who wish to improve their ward activities.

The objectives of the author have been achieved. In each unit of the book Miss Randall introduces problems which the head nurses daily encounter and then furnishes helpful illustrations, charts, tables, and instructions for the young administrators to use in the management of their problems. The chapters on Orientation Programs, The Nursing Personnel of the Ward, The Assignment of Patients and Duties are especially good.

This book is indispensable in all ward libraries and would be a good adjunct to Mary Marvin Wayland's *"The Hospital Head Nurse"* and Anna Taylor's *"Ward Teaching."*

JOYCE MA, R.N.

Gynecology and Gynecologic Nursing. By Norman F. Miller, M.D., and Betty Hyde, R.N. Second edition. 485 pp. with 240 diagrammatic drawings. W. B. Saunders Company, Philadelphia and London, 1949. Price $4.25.

In preparing the text the authors have stressed those things which make for a clearer understanding of the disease. Fundamentals such as basic changes which lead to dysfunction have been emphasized. Organ physiology and normal gland function precede consideration of abnormal conditions. This attempt to create understanding in addition to presenting a clear description of disease is characteristic of the entire text. There has been a free use of drawings and illustrations to clearly portray specific conditions and procedures. The chapter entitled "The Psychosomatic Approach in Gynecology" is interesting and definitely a modern viewpoint which should be considered when presenting gynecological nursing.

The material in this book is especially well presented and should prove to be a good text for student's use.

GERALDINE WELLS, R.N., B.S.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 289th regular meeting of the Hawaii County Medical Society was held in the staff room of Hilo Memorial Hospital on October 26, 1949. The following members were present: Doctors Bernstein, Brown, M. H. Chang, W. T. Chock, Crawford, Kasamoto, Kutsunai, Leslie, Matsumura, Miyamoto, Okumura, Orenstein, Oto, Tomoguchi, Wong, and Yamanoha.

There was a discussion on the fee schedule of the Honolulu County Medical Society; it was stated by Dr. Quisenberry, the speaker of the evening, that this fee schedule was but a "standard." It was the consensus of opinion among the members present that the discussions were "much ado about nothing" and that their fee schedule would more than likely agree with our concept of fee schedules. It was felt that the secretary should send a copy of the fee schedules to each member after writing to Dr. Arnold for copies and whatever changes may have been made on it. It was so moved by Dr. Crawford, seconded by Dr. M. H. Chang and unanimously approved. It was further decided that members should make any comments regarding the fee schedule directly to the Honolulu County Medical Society.

Dr. F. Bernard Schultz's letter to the Society regarding a possible address was referred to the program committee. It was suggested that we should try and have either Dr. Goldman or Dr. Hartwell to address the society if this were at all possible.

A discussion of utilizing the posters against government medicine, a reproduction of the painting "The Doctor" with the caption "Keep Politics Out of This Picture" was held and at the end of the meeting, the Public Policy and Grievance Committee decided to post these at three conspicuous spots in town for one week.

At 8:30 p.m. Dr. Quisenberry addressed the society on the "Cytologic Technique Test" augmented by a sound movie on the "Ayers Cytologic Technique." The discussion which followed was active.

The business meeting was continued after the main scientific program was finished.

A vote was taken on the application of Dr. John James Milford, Jr., for admission to the society and it was approved unanimously; the secretary was instructed to notify Dr. Milford of the action of the society.

A letter from Mrs. Jessica Bosworth announcing the opening of a telephone-secretarial service was read. It was announced that Mrs. Bosworth would contact each physician and that service of the exchange would begin November 1, 1949.

A heated discussion arose on the question of X-ray interpretation and work permits for food handlers and teachers. Dr. M. H. Chang moved and it was seconded by Dr. Kutsunai that a committee of 2 physicians be appointed to read such X-rays together with Dr. Leslie. This motion was not approved.

* * *

The 290th regular meeting of the Hawaii County Medical Society was held in the staff room of Hilo Memorial Hospital on November 17, 1949, with the following members present: Drs. Bernstein, M. L. Chang, Haraguchi, Kasamoto, Loo, Matsumura, Miyamoto, Okumoto, Orenstein, Phillips, Tomoguchi, and Yuen.

The letter from the Honolulu County Medical Society in the matter of Dr. Fred Irwin and a copy of that Society's letter to the President of the Board of Directors of HMSA were read. In this respect, Dr. Orenstein reported on the quarterly meeting of the HMSA in Honolulu. He stated (1) that the HMSA is financially sound, (2) that the HMSA can continue to function if payments can be kept to 70% of the receipts, (3) that plans are under way to enable assistants be paid directly, (4) that Mr. Ward of the Hilo office is being trained further in Honolulu, (5) that the Physicians Reserve Fund is intact and will be distributed, (6) that the HMSA plan is very liberal and it is up to us doctors to act sensibly in the matter of its interpretation, (7) that the Telephone company has been issued a policy by HMSA, (8) that doctors' bills more than three months old will have to be screened by a board, and (9) the background of the case of Dr. Fred Irwin. The Secretary was ordered to get together with Dr. Orenstein and frame a letter to be sent to the President of the Board of Directors of HMSA and that a copy of this letter be sent to the Honolulu County Medical Society since they had requested a copy of such a letter.

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The 291st regular meeting of the Hawaii County Society was a dinner-meeting held at the Lanai on Thursday evening, December 15, 1949. Members present were: Drs. Bergin, Bernstein, Brown, Carter, M. H. Chang, M. L. Chang, Chock, Depp, Hata, Kasamoto, Kutsunai, Leslie, Loo, Matsumura, Miyamoto, Mizuire, Okumoto, Orenstein, Oto, Phillips, Tomoguchi, Wong, and Yuen. Guests were Mr. Patterson and Mr. Ward of the HMSA and Dr. Alfred S. Hartwell of The Clinic in Honolulu.

After dinner, Mr. O. B. Patterson, executive director of the HMSA, presented a brief report on the financial status of HMSA and a resume of the changeover to the new plans I, II, and III now in effect. He stated that distribution of the Physicians' Reserve had been withheld because of a changeover from fiscal to calendar year. He emphasized that right now, the HMSA is in no financial difficulty.

The guest speaker of the evening was Dr. Hartwell who talked on "Bradycardia and Tachycardia." At the end of his talk, he discussed the use of anticoagulants for myocardial infarction at the request of the members present.

A letter of appreciation from Mrs. Pete Okumoto for the flowers sent her by the society on the occasion of the birth of their second child was read.

A letter from Dr. H. L. Arnold, Sr., president of the Hawaii Heart Association, regarding a project of assisting physicians on each island in the diagnosis and management of heart diseases by means of clinics, was read and discussed. It was moved by Dr. Orenstein and

seconded by Dr. Leslie and unanimously approved that this Society would favor and endorse such a program.

Dr. Mizuire stated that the Blood Bank was in need of more refrigerator space, and that he hoped the Society would purchase one for the Bank. It was moved by Dr. Phillips, seconded by Dr. Matsumura and unanimously approved that each member be assessed a like sum to finance the purchase of this refrigerator for the Blood Bank.

ROBERT M. MIYAMOTO, M.D.
Secretary

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HONOLULU COUNTY MEDICAL SOCIETY

The regular November meeting was held on the first Friday of the month in the Mabel Smyth Auditorium; about 115 members and guests were present. Dr. Arnold, Jr., presided.

It was announced that the City and County Attorney, Mr. Godbold, had ruled that when a patient dies within twenty-four hours after admission to a hospital, the coroner's investigation need not include removal of the body to the morgue unless a coroner's autopsy is required.

After a lengthy discussion of the question of the advisability of admission of osteopaths to the staff of the Convalescent-Nursing Home, it was moved, seconded, and carried by a vote of 95 to 3, that the Society go on record as being opposed to the admission to such staff of any practitioners other than doctors of medicine, until the standards of training and licensure for such practitioners were raised to such a level as to permit them to be admitted to practice in general hospitals, and also that if such practitioners are admitted to the staff, members of the Honolulu County Medical Society would not send patients there.

It was announced that the U. S. Life Insurance Co. had been authorized by the Board of Governors to offer to the membership of the Society a group disability insurance plan, the same plan that had previously been approved and adopted by the Bar Association and the Dental Association.

The matter of fraudulent claims against health insurance companies by physicians was discussed, and the advisability of the Society's taking action against such physicians was debated pro and con. It was brought out that many of the doctors involved in such practices are not members of the Society. A motion to approve legal action against such physicians by the insurance company or companies concerned was made, seconded, and tabled.

Dr. Irwin's protest against a reduction by one-half of his HMSA salary was discussed, and the Society voted to recommend to the HMSA that the reduction be made up by a like amount taken from the Physicians' Reserve Fund; legal means of accomplishing this result were to be worked out later.

Dr. Walsh, Treasurer, reported that there had been invested by the Society $10,000 in Series G and $6,000 in Series D Government Bonds, and that the Society's budget, with a previously purposely omitted expenditure for postgraduate expenses added, would be only about $600 in the red at the end of the year.

Dr. Harold Johnson presented a paper on the Management of Atopic Eczema in the Infant and the Adult and Dr. John Lowrey gave a paper on Repair of Skull Defects. Mr. J. K. Mumford told about the work of the F.B.I.

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Dr. Arnold, Jr., presided at a special meeting of the Honolulu County Medical Society held in the Mabel Smyth auditorium on Wednesday evening, November 23, 1949. There were about 75 present, including physicians and dentists with their wives and guests.

Dr. Arnold introduced Mr. Edward Gibbons, editor of *Alert,* a weekly confidential report on communism and how to combat it. He was brought to Hawaii by the Citizens' Committee. Mr. Gibbons addressed the Medical Society on the subject of communism.

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The regular December meeting of the Society was held at the usual time and place; about 98 members and guests were present, and Dr. Arnold, Jr., presided.

It was announced that there had been about 60 per cent of the minimum required enrollment in the group disability insurance plan, and members were urged not to delay their enrollment.

The Convalescent-Nursing Home question had been solved by a compromise, it was announced, in which no attending staff was to be created, but only a Medical Advisory Committee of three members, possibly including one osteopath, appointed by the Directors of the Home; this committee was to be responsible for approving applications for admission to the Home, by whomever made, and for approving requests by patients to have any sort of practitioner treat them in the Home. Thus no restrictions are stipulated by the Home's By-Laws, but are merely provided by the judgment of the Medical Advisory Board in any given case.

It was voted to appoint two doctors for a year at a time in sequence from a panel of volunteers for the position of members of a board of three to review contested decisions of physical disability of prison employees, as requested by the Deputy Warden.

Dr. Durant stated that the Public Service Committee's questionnaire had been answered by about one-third of the members, and that the answers overwhelmingly approved the conducting of a public opinion poll on medical practice. The matter was voted to be referred to the Board of Governors for specific recommendations for further action.

The new fee schedules for laboratory procedures and eye, ear, nose and throat work were passed for first reading, and the fee schedule for extremities and spine work was passed on second reading, with no dissenting votes.

The expenditure of $3,000 to bring Dr. Blalock and Dr. White to Hawaii in May, 1950, as postgraduate lecturers was approved.

Dr. Edward F. Cushnie read a paper entitled "A Lost Art in Obstetrics"; Dr. Thomas Fujiwara read a paper entitled "Common Blood Dyscrasias Encountered in General Practice"; Dr. William Walsh regaled the members with an account of "My Day"; and Dr. David Katsuki mystified the Society with a demonstration of feats of prestidigitation and sleight-of-hand and other demonstrations of the magician's art.

Refreshments were served following adjournment of the meeting at 10:00 p.m.

JOHN W. DEVEREUX, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held in the library of the Wilcox Memorial Hospital on October 12 at 7:30 p.m. The meeting was called to order by President Masunaga. Members present were Drs. Goodhue, Wallis, Chisholm, Kuhns, Bieber, Masunaga and Fujii.

The members of the Society voted in favor of Dr. Bieber's application for membership.

An urgent letter from Dr. R. B. Faus regarding the examinations of National Guard recruits, plus urinalysis and booster shots, was read and discussed. The majority of members anticipated conflict with office hours. The members felt that the former fee of $2.50 was incompatible. It was suggested a $5 fee would be more tolerable at this time. It was also suggested that in replying to Dr. Faus he be asked to contact all physicians on Kauai regarding this $5 fee. It was moved by Dr. Wallis, seconded and passed, that a letter be written to Dr. Faus about this matter.

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A combined dinner-meeting of the Kauai County Medical Society was held at Kauai Inn on November 9, 1949, at 6:30 p.m. Guest speaker was Dr. Joseph Strode. Members present were Drs. Kuhns, Wallis, Cockett, Fujii, Masunaga, Ishii, Chisholm, Wade, and Goodhue. Guests were Drs. Kemp and Steuerman and the wives of the members.

The meeting was very informal with Dr. Strode going right into his talk on surgery in general. He spoke on various topics such as thyroid, breast tumor, osteo, abscess of lung, intestinal obstruction, gall bladder, diaphragmatic hernia, gold needle, hyperparathyroidism, gastric ulcer, and ruptured ulcer. He also showed films on osteo, gold needle, stomach ulcer, and intestinal obstruction. Having completed his talk on surgery, the meeting was turned over to the members.

Letters regarding Dr. Irwin's salary were read and openly discussed. The members unanimously objected to the wage cut, and also that his reduction in salary, if any, be made up from the Physicians' Reserve Fund. It was decided that a letter be written to the Honolulu County Medical Society and a carbon copy sent to the HMSA informing them of this decision.

With no other business to be discussed, the meeting adjourned at 10 p.m.

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The Kauai County Medical Society held a dinner meeting at the Kauai Inn on December 14, 1949, at 7 p.m. Guest speakers were Dr. Donald C. Marshall and Captain Sakoda of the police force. There were 28 guests in addition to the following members: Drs. Masunaga, Bieber, Ishii, Wade, Fujii, Kuhns, Wallis, Cockett, Brennecke, Goodhue and Boyden.

An informal meeting followed the dinner. Captain Sakoda talked about the driving of vehicles while intoxicated. The Society passed a motion by Dr. Brennecke that all doctors cooperate with the police in their efforts to enforce safe driving laws.

Dr. Marshall spoke on various aspects of pediatrics, including premature babies, care of infants, breast feeding, allergy, asthma, allergic rhinitis, and the monthly care, feeding and immunizations for babies up to the age of one year.

The meeting was adjourned at 11:30 p.m.

K. K. Fujii, M.D.
Secretary.

NOTES AND NEWS

PERSONALS

DR. AND MRS. THOMAS RICHERT, of Honolulu, are the proud parents of their first daughter and third child, Tiare Hamilton, born at The Queen's Hospital, on December 11.

DR. AND MRS. SAM I. TASHIMA, of Honolulu, have announced the birth of their first son, who was born at the Kapiolani Hospital, on November 28. The Tashimas have a daughter three years old.

DR. ALBERT K. T. HO, a native of Honolulu, has opened his offices, specializing in ear, nose and throat. **DR. HO** is a graduate of Punahou School, the University of Hawaii and the Jefferson Medical College, in 1942. His internship was at the Jefferson Hospital, Philadelphia, following which he served in the Army in the European theater for three years, receiving his discharge as a captain. His residency in his specialty was at the Massachusetts Infirmary of Otolaryngology and at the Harvard Medical School, where he was an instructor in otolaryngology. He has been certified by the American Board of Otorhinolaryngology.

DR. KIKUO KURAMOTO, a native of Honolulu, has opened his offices for the practice of internal medicine in the new Medical Arts Building at Thomas Square, Honolulu. **DR. KURAMOTO** is a graduate of the University of Hawaii with the degree M.S., in 1940, and of the Northwestern University Medical School, in Chicago, in 1945. His internship was at the Michael Reese Hospital, Chicago. He was a resident in pathology for one year at this hospital and spent one year at the Alexian Brothers Hospital, Chicago, in internal medicine. He returned to the Michael Reese Hospital for one year as a Fellow in Cardiology under Dr. Louis Katz.

A tragic loss to the future of Honolulu medicine was the sudden death of **DR. MAN HING AU,** who died during his internship at Cincinnati General Hospital. **DR. AU,** a native of Honolulu, was graduated from the Washington University Medical School in St. Louis, in 1949, having received his preliminary education at Punahou School and at the University of Hawaii. He was formerly associated with the Leahi Hospital as a laboratory technician and served for three years as an administrative officer in the United States Army Air Corps in the Chinese Language Detachment. THE JOURNAL extends its deepest sympathy to his family in their loss.

Two notable additions to the medical profession were completed in December. **DR. LOUIS GASPAR** and **DR. LESLIE VASCONCELLOS** held an open house on December 2 announcing the completion of a new professional building at the corner of Emma and Kukui Streets at the site of their previous offices. The building is a two story concrete structure, modern in design. The second floor of the building is occupied by **DR. H. C. CHANG,** radiologist, and Dr. Albert Wong, dental surgeon. The other addition to medical facilities in Honolulu was the completion of the Medical Arts Building at Thomas Square, built by **DR. RICHARD SAKIMOTO.** An open house was held on Sunday, December 4, for the public as well as the medical profession. The following, besides the owner, **DR. SAKIMOTO,** have taken offices in this modern, beautifully appointed office building: **DR. JOHN KOMETANI,** pediatrician; **DR. CLARENCE KUSUNOKI,** otolaryngologist; **DR. KIKUO KURAMOTO,** internist; **DR. Y. FUKUSHIMA,** surgeon; **DR. TETSUI WATANABE,** radiologist; Dr. Harry Ishida, dental surgeon, and Mr. Stanley Yonamine, clinical laboratory technologist. THE JOURNAL extends its heartiest congratulations to the above on the completion of these new structures.

DR. LYLE G. PHILLIPS, of Honolulu, has returned from attending the meeting of the American College of Surgeons in Chicago and the meeting of the Central Association of Obstetricians and Gynecologists, held in Oklahoma City.

An interesting medical family reunion was held in December, when the father and brother of **DRS. HOMER AND ROBERT BENSON,** of Honolulu, arrived to visit them. Their father, **DR. GIDEON BENSON** of Richland Center, Wisconsin, and their brother, **DR. GEORGE BENSON** of Lake Bluff, Illinois, arrived on the Lurline and reunited the family for the first time in 18 years. The senior **DR. BENSON** is an active general practitioner in Wisconsin at the fine, young age of 83 years, having been in practice in Richland Center for the last 50 years. **DR. GEORGE** is at the Downey Veterans Hospital in charge of the Veterans Rehabilitation and Physical Medicine Department of this hospital. Their wives accompanied them on this visit to the islands.

The City and County of Honolulu opened the new $750,000 addition to the Maluhia Home on Armistice Day. This new three story modern, concrete and glass building located on Hala Drive is a project for which **DR. THOMAS MOSSMAN,** City and County physician, has worked for a number of years. The building houses 150 patients, and is designed to care for the medically indigent, who do not require actual hospital care, but rather are suffering from chronic ailments or convalescing from treatment in one of the private hospitals in the city.

DR. JOSEPH ALICATA, Ph.D., parasitologist at the Experiment Station of the University of Hawaii, has been awarded a research grant by the United States Public Health Service to study the effects of radiation. He will carry on this work this year at the National Institute of Health, at Bethesda, Maryland.

DR. DEAN BUNDERSON is the new assistant physician at the Oahu Sugar Company, Waipahu Hospital, under **DR. HARRY CHANDLER. DR. BUNDERSON** was formerly a member of the surgical staff of the Aiea Naval Hospital with a rank of Lieutenant (jg) in the U. S. Navy. **DR. BUNDERSON** is a former Queen's Hospital interne.

DR. J. WARREN WHITE has returned to Honolulu to become chief surgeon of the Shriners Hospital and to practice his specialty of orthopedic surgery, in the Dillingham Building, Honolulu. **DR. WHITE** was surgeon to the Shriners Hospital from 1924 to 1927, following which he was chief surgeon at the Greenville, South Carolina Shriners Hospital. His many friends welcome him back to Honolulu. **DR. WHITE** is a graduate of the Harvard Medical School, Boston, in 1917 and received his orthopedic training in the United States Navy Medical Corps, Carney Hospital, in Boston and Massachu-

setts General Hospital. He is a member of many orthopedic societies including the American Orthopedic Association, American Academy of Orthopedic Surgeons, Southern Surgical Society, American College of Surgeons and many others. He has been a member of the American Orthopedic Board for the last two years. He is associated with the Territorial Crippled Children program and also a civilian consultant of the Tripler General Hospital. Before coming to Honolulu he was a faculty member of the Duke University Medical School.

THE JOURNAL congratulates **BRIGADIER GENERAL WILLIAM E. SHAMBORA,** USARPAC Surgeon, who was recently awarded his stars. **GENERAL SHAMBORA** has led a very distinguished military career, receiving many citations and medals during his years of services in the European theater during World War II as well as in his previous hospital and post appointments.

DR. CARL JOHNSEN, anesthesiologist at the St. Francis Hospital, Honolulu, has recently received word of his successful completion of the examinations of the American Board of Anesthesiology. **DR. JOHNSEN** took these examinations in Denver, last fall, and is the first physician anesthetist in the Territory to be so honored.

DR. RICHARD D. KEPNER of Honolulu was elected to membership in the Royal Medico-Psychological Association of Great Britain and Ireland. This association is the British counterpart of the American Psychiatric Association.

DR. LOUIS SHAPIRO has recently been appointed Government Physician for the Waianae district of Oahu. This position was created by the Territorial Board of Health to help make it possible to offer medical care to the residents of the Waianae district. **DR. SHAPIRO** was formerly the physician at Hana, Maui.

DR. E. W. YOU has returned to Honolulu after three and a half years absence to become Director of Anesthesia at The Queen's Hospital. **DR. YOU** is a native of Honolulu and attended Punahou School, the University of Hawaii, and was graduated from Creighton University Medical School, in Omaha, Nebraska, in 1932. He interned at the St. Johns Hospital, Fargo, North Dakota, for two years following which he continued his training at the Long Island Hospital, in Boston. He was engaged in general practice in the city of Honolulu from 1937 to 1946 following which time he returned to the mainland to specialize in anesthesiology at the Boston City Hospital. He is a member of the Massachusetts Society of Anesthesiology and the American Society of Anesthesiology. His brother, **DR. RICHARD YOU,** is practicing in Honolulu.

DR. THOMAS W. COWAN has returned to The Clinic, Honolulu, after an extended mainland trip during which time he attended the meetings of American Academy of Ophthalmology and the American College of Surgeons. He also took postgraduate study in ophthalmology at the University of California in San Francisco.

DR. SHOYEI YAMAUCHI, of Honolulu, has returned from a mainland visit during which time he attended the American College of Surgeons meeting in Chicago and visited surgical clinics in Baltimore, Boston and Rochester, Minnesota.

DR. AND MRS. MORTON E. BERK have returned to Honolulu and **DR. BERK** has resumed his practice at the Medical Group after a year of graduate study in San Francisco. **DR. BERK** was a special graduate student under Dr. Arthur Bloomfield in internal medicine at the Stanford University Hospital. On their return trip they brought back with them their first son, Brent Thales, born July 27.

DR. ANDREW MORGAN, assistant surgical resident of The Queen's Hospital, has returned from a short course in atomic warfare and radiation medicine held in Washington, D. C. **DR. MORGAN** made this trip while on active duty with the Hawaii National Guard.

The St. Francis Hospital announces the addition of **DR. SHI CHO TANG** to the interne staff. **DR. TANG** is a native of China and is a graduate of Sen-Yet Medical School, in 1948, following which time he was associated with the Canton Clinic.

During **DR. CHARLES L. WILBAR's** trip to the mainland in October, he attended the national conference on Physicians and Schools at Highland Park, Ill., the communicable disease conference of the U. S. Public Health Service in Atlanta, Georgia, and the state and territorial health officers' conference, the American Public Health Association, and the conference of state and provincial health authorities of North America, in New York City.

DR. STEWART E. DOOLITTLE, of The Clinic, attended sectional meetings of the American College of Physicians in Buffalo, N. Y., and of the Southern Tuberculosis Association in Memphis, Tenn. He also visited medical clinics at Ann Arbor, Michigan, Cincinnati and in Rochester, Minnesota.

Kauai

DR. DOROTHY HOPE KEMP has taken over her duties as County Health Officer for Kauai. **DR. KEMP** is the daughter of Judge and Mrs. Samuel B. Kemp, Chief Justice of the Supreme Court of Hawaii. **DR. KEMP** is a graduate of Punahou School and received her B.A. from the University of Hawaii. She graduated from the University of California Medical School, in 1934, and practiced in San Francisco until 1948.

Maui

DR. AND MRS. GUY HAYWOOD, of Kahului, Maui, have announced the birth of a baby boy on October 19, 1949, who weighed 8 pounds and 13 ounces.

DR. AND MRS. EDWARD UNDERWOOD went to the mainland for a vacation on November 1, 1949.

Hawaii

DR. S. MIZUIRE returned on October 23 from the meeting of the American College of Surgeons held in Chicago, where he received his fellowship in this organization.

Mrs. E. B. Cunningham, wife of **DR. CUNNINGHAM,** of Pahala Hospital, underwent surgery recently and has convalesced favorably.

DR. AND MRS. PETE OKUMOTO welcomed their second daughter on November 19.

A delegation of physicians from this society which included **DOCTORS BERGIN, CUNNINGHAM, DEPP** and **FERNANDEZ** attended the recent Plantation Physicians' meeting in Maui.

DR. GEORGE Y. TOMOGUCHI, the president of this Society, has appointed his committees for the coming Annual Territorial Medical Meeting.

DR. FREDERICK LAM, formerly at Kohala Hospital, has transferred from this Society to the Honolulu County Medical Society.

DR. C. L. CARTER recently addressed the Honokaa High School and Elementary PTA on the subject of "Bubonic Plague."

SCHEDULE OF MEDICAL MEETINGS—1950

CHILDREN'S HOSPITAL

12:30 P.M. Ward Rounds (Luncheon) every Monday.
12:30 P.M. Monthly Staff Meeting (Luncheon) 4th Friday.

HONOLULU COUNTY MEDICAL SOCIETY

7:30 P.M. Monthly Meeting, 1st Friday at Mabel Smyth Auditorium.
4:15 P.M. Board of Governors Meeting, Tuesday of the week preceding County Meeting in Mabel Smyth Lanai.

KAPIOLANI HOSPITAL

12:30 P.M. Monthly Staff Meeting (Luncheon) 3rd Thursday.

KUAKINI HOSPITAL

5:15 P.M. Monthly Staff Meeting (Dinner). (Make reservations before Thursday.)

LEAHI HOSPITAL

7:30 P.M. Sinclair Club (for study of diseases of the chest) 2nd Friday.

QUEEN'S HOSPITAL

12:30 P.M. Monthly Staff Meeting (Luncheon) 4th Thursday.

ST. FRANCIS HOSPITAL

12:30 P.M. Monthly Staff Meeting (Luncheon) 3rd Friday.

TERRITORIAL MEDICAL MEETING

May 4-7, 1950, in Hilo, Hawaii.

TUMOR CLINICS

1:00 P.M. 1st and 3rd Tuesday, Queen's Hospital.
1:00 P.M. 2nd and 4th Tuesday, St. Francis Hospital. Dr. Walter Quisenberry, Director, Territorial Board of Health. For free consultation and examination of any patient by a qualified Tumor Board. Schedule case with Director by Monday each week.

SPECIAL SOCIETIES

HONOLULU ACADEMY OF GENERAL PRACTICE

7:30 P.M. 3rd Friday (alternate months with Surgical Society) Mabel Smyth Auditorium.
President: Dr. Alvin V. Majoska.
Secretary-Treasurer: Dr. John M. Felix.

HAWAII DERMATOLOGICAL SOCIETY

At announced dates.
President: Dr. Harold Johnson.
Secretary-Treasurer: Dr. Harry Arnold, Jr.

HONOLULU EYE, EAR, NOSE & THROAT SOCIETY

7:30 P.M. 3rd Thursday, Mabel Smyth Auditorium.
President: Dr. Robert Wong.
Secretary-Treasurer: Dr. O. D. Pinkerton.

HONOLULU OBSTETRICAL & GYNECOLOGICAL SOCIETY

7:30 P.M. 3rd Monday, Monthly, Mabel Smyth Lounge.
President: Dr. K. S. Tom.
Secretary-Treasurer: Dr. Satoru Nishijima.

HONOLULU PEDIATRIC SOCIETY

3rd Thursday—Dinner (closed).
President: Dr. Francis P. Nance.
Secretary-Treasurer: Dr. Teruo Yoshina.
State Chairman for American Academy of Pediatrics: Dr. Joseph Palma.

HONOLULU SURGICAL SOCIETY

7:30 P.M. 3rd Friday (Alternate months January, March, May, July, September, November). Mabel Smyth Auditorium.
President: Dr. C. M. Burgess.
Secretary-Treasurer: Dr. Laurence M. Wiig.

N.B. Above meetings are open meetings to licensed physicians, service physicians, residents and internes, with but few exceptions, attendance is welcomed.

NEWS

Plantation Physicians Meeting

The annual meeting of the Plantation Physicians' Association was held in November at Puunene, Maui, under the presidency of **DR. WILLIAM B. PATTERSON.** A panel on fractures was conducted by **DR. LEONARD J. GOLDWATER** and participated in by **DR. IVAR LARSEN, DR. EDWARD C. HOLMBLAD** and **DR. GUY S. HAYWOOD.** Taking part in the remainder of the program were **DRS. F. A. ST. SURE, WM. B. PATTERSON, J. A. BURDEN, NILS P. LARSEN, WM. H. WILKINSON, P. H. LILJESTRAND, HAROLD S. KUSHI, RALPH B. CLOWARD, JOSEPH E. FERKANEY,** and **H. L. ARNOLD, JR.**

The scientific meeting lasted for two days. At the business meeting, **DR. SAMUEL WALLIS** of Lihue, Kauai, was elected president, **DR. C. L. CARTER** of Honokaa, Hawaii, was elected vice-president, and **DR. FRANK H. HATLELID** of Waialua, Oahu, was re-elected secretary-treasurer. Miss Doris Larsen will continue as executive secretary.

Christmas Breakfast

The Woman's Auxiliary to the Honolulu County Medical Society held a Christmas breakfast at Halekulani Hotel on December 6. Mrs. Fern McQuesten discussed children's and teen-agers' books for Christmas.

American College of Physicians

The Hawaii chapter of the American College of Physicians met at Tripler Hospital on December 6, with **DR. NILS P. LARSEN** conducting the program. The participants were **DRS. H. H. WALKER, W. O. FRENCH, R. M. deHAY, M. E. BERK, A. S. HARTWELL, R. D. KEPNER, F. L. GILES, L. C. BECK** and **H. L. ARNOLD, SR.** and **JR.**

Honolulu Academy of General Practice

At a recent meeting of this Society **DR. PHILIP S. ARTHUR** discussed the subject of "Everyday X-ray Problems."

Honolulu Surgical Society

At a recent meeting of Surgical Society **MAJ. HAROLD F. BERTRAM,** of Tripler General Hospital presented a paper on "The Non-operative Treatment of Perforated Duodenal Ulcer with a Report on 16 Successful Cases." The discussion was opened by **DR. JOSEPH E. STRODE** and **DR. LAURENCE M. WIIG.** Another paper was presented by **LT. COL. DAVIS G. EISNER** on "Secondary Treatment of the Post-thrombotic Syndrome." The discussion was opened by **DR. R. G. JOHNSTON** and **DR. C. M. BURGESS.**

An election of officers was held at which time **DR. C. M. BURGESS** was elected president and **DR. LAURENCE M. WIIG** was re-elected secretary-treasurer.

Honolulu Obstetrical and Gynecological Society

The November meeting of this Society was addressed by **DR. HERBERT E. BOWLES** on "Observations from my

Recent Mainland Trip." Another paper was given by **DR. RICHARD Y. SAKIMOTO** on "Primary Uterine Inertia" with case presentation. The December meeting of this Society was addressed by **DR. LYLE G. PHILLIPS** on "A Report on the Meeting of the Central Association of Obstetricians and Gynecologists."

Obstetrical and Gynecological Meeting

There will be a meeting of International and 4th American Congress on Obstetrics and Gynecology at the Hotel Statler in New York City, May 14 to 19, 1950. The program for this meeting seems to be a very comprehensive and instructive one and anyone desiring to attend should contact Dr. Fred Adair, of 161 East Erie Street, Chicago, Illinois.

American College of Surgeons

At the annual meeting of the American College of Surgeons in Chicago the following surgeons of Hawaii were admitted as Fellows: **DR. SHIZUTO MIZUIRE,** of Hilo; **DR. LUP QUON PANG,** of Honolulu; **DR. BURT O. WADE,** of Waimea, Kauai.

Hawaii Cancer Society

This Society would like to call to the attention of all practicing physicians the availability of their cancer cytology service on any patient from any doctor. This includes the free examination of vaginal smears, or examination of fluid from other parts of the body for malignant cells. At the present time less than one-fourth of the practicing physicians in the Territory are using this service and in view of the fact that one per cent of the specimens sent in for examination have revealed unsuspected cancer cells it would seem extremely advisable for more physicians to use this means of diagnosis in order to detect unsuspected cases of cancer.

Containers for mailing are available free of charge at the Society Headquarters on Punchbowl Street. If you have not yet taken advantage of this cytological service it is recommended that you try to in the near future.

ACTH

Announcement was made December 6 by Armour and Company that, effective January 1, its new "wonder drug" ACTH will be sold to investigative clinics. Heretofore ACTH had been supplied free of charge to the clinics. It has not been available for private use and probably will not be for some time to come.

Sterility Society Meeting

June 24-25, 1950, The American Society for the Study of Sterility, Sir Francis Drake Hotel, San Francisco, California.

The Society is offering an annual award of $1,000 known as the Ortho Award for an essay on the result of some clinical or laboratory research pertinent to the field of sterility. Competition is open to those who are in clinical practice as well as to individuals whose work is restricted to research in basic fields or full time teaching positions.

Full particulars may be obtained from the Secretary, Dr. Walter W. Williams, 20 Magnolia Terrace, Springfield, Massachusetts. Essays must be in his hands by April 1, 1950.

American Board of Orthopaedic Surgery, Inc. Change in Regulations

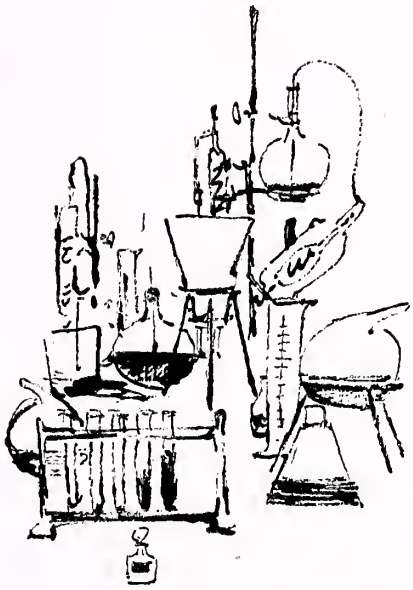
(2) EXAMINATION, Part I.

(a) Eligibility for Examination, Part I: Beginning in the year 1952 the minimum requirements for eligibility for examination, Part I, shall consist of completion of an internship; a year of resident training in general surgery and *two* years of resident training in orthopaedic surgery on an approved service.

Applicants filing in 1951 for examination, Part I, to be given in 1952 are subject to these minimum requirements.

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We are about to turn a page in the book. The final entries for 1949 have been made, but we cannot close it without adding one thing more.

This is it: "To you, our customers and friends, we owe a debt of appreciation for the business you have given us during the past year. For that business, for your friendliness and spirit of kokua, we thank you."

And here's our resolution for the new year! More than ever, we shall strive to earn a continuance of your business. We pledge our best efforts to serve you in every field and need within our power.

And now, across the top of both pages, in big letters, may we extend to all the trade, the most cordial greeting for the New Year!



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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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CHILD DEVELOPMENT, BIRTH TO ADOLESCENCE

An institute on "Child Development, Birth to Adolescence," conducted by the Territorial Department of Health was held on Kauai November 7 and 8, and attended by about two hundred people.

Dr. Pauline Stitt, Chief of the Bureau of Maternal and Child Health and Crippled Children, and Dr. John Lynn IV, Chief of the Bureau of Mental Hygiene, Territorial Department of Health, were the principal speakers.

The institute was originally planned for Public Health Nursing in-service training but because of popular demand, it was extended to include hospital nurses, doctors, social workers, Red Cross nurses and teachers.

The child from "infancy to school age with consideration of his physical and emotional development" was the main theme of the first day meetings; "The child from six to ten" and "The adolescent and his problems" were themes for the second day sessions. A movie, Child Development, was shown and cases were presented to point out various phases of the developmental processes.

Notes were taken by Miss Alison MacBride and Mrs. Helen Gage throughout the two day sessions. Because so many requests have been received for copies of these notes, they are being published in order to give all the nurses in the Territory and others who are interested a chance to review them.

* * *

The opening meeting focused on the first year of life. Prenatal influence on the infant's emotional life is negligible except for the mother's and family's attitude toward motherhood which is a potent influence on emotional development after birth. The mother's orientation toward motherhood definitely affects the whole course of pregnancy. Her orientation was seen as a composite of cultural, psychological and biological factors and attitudes.

Many women have been unduly harassed by the wide publicity given to the Rh factor. The problem gets cut down to size with the knowledge that only 15 per cent of caucasian women and a considerably lesser per cent of oriental women are Rh negative; and the risk present in this negative group is further reduced because some of their Rh positive husbands are heterozygotes who carry Rh negative genes as recessive traits. A rising titer is no longer regarded as justification for interruption of pregnancy as there is no correlation between rise in titer and damage to baby. Rising titer may be an anamnestic reaction. The danger of sensitizing Rh negative girls and women before first pregnancy through transfusion of positive blood points up the need to determine Rh status before transfusion, or if this determination cannot be made, Rh negative blood should be given.

The baby during labor is subjected to tremendous pressure changes caused by decompression as well as the banging involved in the mechanics of labor. His oxygen supply is shut off and a good many newborns continue to suffer oxygen hunger for days until their respiratory function is completely established. Mothering, stroking and fondling of the newborn helps him to breathe deeper

and open up his unused alveolar spaces. Anoxia predisposes the newborn to hemorrhage.

Young babies swallow air as they suck fists. These air bubbles actually help to open up the alimentary tract. The sucking function is not fully developed at birth and the baby's sucking of his fists helps to develop muscle uses which improve sucking ability. The baby is unprepared to make temperature adjustments for many weeks; he is also unprepared at birth for respiration and biochemical regulation as all of these functions had been carefully governed for him in utero.

The case of a six-year-old boy, rejected by his mother at birth, and left to the care of a dominating and over-protective foster mother was discussed. His first year developmental history was advanced except for teething. Teething is not closely correlated with other developmental norms; the poorest specimens of babies on a pediatric ward are frequently precocious teethers. This boy had had unnecessary emotional trauma perhaps because his "shots" had been postponed until the preschool period. All immunizations can be completed during the first year without traumatic associations lingering. The case material brought out the following data about the character of the foster mother's over-protection; the child had been kept in a babyhood dependency state through the postponement of "shots" and cutting his hair. He took one quart of milk daily in the preschool period to the exclusion of other foods which "were only for adults." The foster mother's sadistic nature was seen in the frequency with which enemas had been given. There are very few indications for enemas in pediatric practice. Psychosomatic elements in the boy's several illnesses were probably the consequence of his frustration in becoming self dependent. The foster mother was interpreted as a sadistic, domineering woman with a neurotic need to enslave the boy and her husband and make them dependent on her. The boy was transferred to an aunt's home, a sister of his mother, who had strongly resented the mother for having "disgraced" the family. Her hostility was soon turned against the boy. He soiled his pants; he would never cry; and he only observed other children at play. The aunt finally evicted him and the last picture of the boy, in an affectionate and kindly foster home, showed gradual improvement. He was being accepted by other children and actively playing with them.

The noon session related to the second and third years of life. Thumb-sucking was seen as satisfying an emotional need of the young child and not meaning hunger. The consensus of pediatric opinion seems to be that it is not a cause of deformity, but there may be exceptions when excessive pulling-out pressure is exerted on the upper jaw. Babies need lots of time to suck at the breast or the bottle in order to satisfy them emotionally. Bottles having large holes in the nipple deprive the infant of his share of oral satisfaction.

A common drive in the second and third year is the striving to become independent and have power and mastery over the "things" in his world. A secure emotional foundation in the first year is essential to the success of the two-year-old's efforts, he feels secure and wants to try his wings in experimenting with the environment only when he is certain of the loving support of his parents. His balkiness and negativism around two is a symptom of his self dependency drive. His feelings are mixed, he wants to be dependent upon his parents and to become self dependent at the same time. During these years he begins to learn some social conformities. In this early socializing process he can accept postponement of satisfactions and minor frustrations if he feels secure in the love of his parents.

The child's first school experience can be a very upsetting period for him. On the physical side he is still pretty close to babyhood and although growing rapidly his neurological and structural development is far from complete and he is in fact a big baby still. He is often a tired child—irritability and hyperactivity are usual indications of fatigue.

On the social-emotional side of his first school adjustment he faces the problem of new people —from the familiar adults of his home to new adults and most importantly to other children of his age. He will have more than average adjustment difficulties if he has not developed some secure relationships with home adults or if he has not learned how to relate to other children his age.

The child who expresses his feelings in aggressive, stubborn, fighting behavior or who is shy or withdrawn is showing signs of poor adjustment to school. His alienation from the group can be traced to one of the following four relationship situations having existed at home: (1) If his reactions are characterized by hostility in school he probably is rejected by one or both parents and is projecting his resentment of this upon his teacher. (2)The teacher's pet is often the child who is rejected at home and has accepted the rejection. He is shy and timid and tries to prove himself worthy of any little crumb of affection his teacher wants to bestow. (3) Then there is the child who cannot meet the demands of social conformity. He is the child who has been spoiled at home. (4) The "model" child has been over-controlled

by loving parents and expresses lots of resentment in covert acts annoying to other children.

Children normal in their early adjustment to school accept men teachers as the father image and women teachers as the mother image. About 20 per cent of children have a serious problem adjusting to first school experience.

The case of an 8-year-old girl who had been referred to the Bureau of Mental Hygiene because she did not respond when spoken to was discussed. This child was thought by her family to be deaf. She showed symptoms of shyness and withdrawal from the group in kindergarten. However, her problem was not recognized by the teacher. Psychiatric study determined that her deafness was a means of escaping the domination of a bossy 15-year-old brother. The child had been over-controlled by her mother. Deafness cleared up when the child was protected from her brother's domination.

This led into a discussion of deafness and partial deafness. The individual with a partial loss of hearing has more severe emotional consequences than does an individual with a complete loss of hearing. The strain, distortion and embarrassment accompanying partial loss is often traumatic, whereas the person with complete loss adjusts earlier with better effect as his adjustment is assisted by his other senses which compensate for this loss.

There was discussion of the Territorial need to develop services to discover and follow-up children who are hard of hearing. It would be helpful to know what the unmet needs are. The group was asked to report these children to the Bureau of Crippled Children. A group of young women on Kauai may initiate audiometric testing in the schools. The purchase of an audiometer by the Kauai unit of the National Society of Crippled Children and Adults is pending.

The next morning the discussion centered on the child from 6 to 10 years. Although a psychoanalytic term for these years is "quiescent period" (to describe this latent stage of psychosexual development), from the standpoint of physical growth this period is tumultuous.

The major causes of death for the child from 6 to 10 are accidents. Malignancies take second place. Accidents are understandable because the child has not developed good motor coordination, he is clumsy and has not yet developed mentally to be capable of discretionary judgment. Malignancies are also understandable because when tissues are growing so enormously fast, there is a greater risk of cells going off the normal growth track. Sex, pituitary, thyroid hormones begin to pour out around seven years, which at times makes him emotionally unstable. His lymphoid tissue growth rate curve begins to ascend abruptly after the eighth year and his many infections are often accompanied by adenopathy. The 6 to 10 period has a greater incidence of disabling sickness in the United States than has any other age period. This is understandable, since so much of the child's energy is being channeled into the business of growing. Protein is often deficient in his diet at this time of great need. Fifteen per cent of his calories should come from protein sources.

Learning capacity in this period is probably reduced and modified by the facts of rapid growth in these ways: (1) With such a great expense of energy going into growth, there is easy fatigability and the attention span is shortened. (2) He often feels like a lummox and may be unhappy and tends to lose *esprit de corps*. (3) The pouring out of hormones at 7-8 years seems to result in a diffusion of feeling which becomes nebulous in quality and difficult to express. This state of feeling interferes with his receptivity to learning. (4) His blood sugar gets low and he is frequently preoccupied by hunger. A protein base at breakfast will stand by longer than carbohydrates.

The normal development of conscience begins with the laying of the foundation for a sense of rightness and wrongness in the first year visceral experiences. If these satisfactions are associated with contact affection by a loving parent the infant comes to associate the fulfillment of his satisfactions with the person of his parent: so the mother's smile and her touch come to mean a promise and guarantee that his expectations of satisfaction will be fulfilled. Out of this early relationship comes the basis for the child's acceptance of delayed satisfactions. To be able to take delays in satisfaction lays the foundation for our learning and acceptance of social controls.

When no contact affection is associated with satisfying visceral needs, there can be no identification with a loving person and so the beginning foundation of conscience is faulty. Children so deprived have no social identification, they are unresponsive to human feelings and have not been able to internalize conscience and social controls. In this group of deprived children are found the psychopathic personalities who cannot become emotionally or socially mature. Identification with a mother-figure is essential to early conscience development.

The second year is a period of conflict since social control begins to be taught. The child wants certainty of acceptance by parents and yet these same parent authorities whom he loves are now imposing social controls for which he hates them. Love usually wins out, hate is repressed and he

learns to accept delayed satisfaction and social conformity. All his actions become loaded with feelings of rightness and wrongness.

Toward the end of the third year language enters as an organizer to conscience values. He can verbalize rightness or wrongness in terms of the prohibitions and approvals of his mother. So far he has no rational machinery for knowing right from wrong. Conscience development is just a matter of internalization by him of parental attitudes at this stage.

After four years the boy identifies with his father and tries to be like him. He takes him over as a mature male image of himself. This is a new set of values for him as he absorbs more and more of father's attitudes and conscience structure. Girls play out the role of being mother and take her over as the mature female image of themselves.

At school age the child has reached a more mature form of conscience development as he now is taking over the attitudes and values of parent-figures of his own sex. The lack of male teachers deprives boys of this identification which the male teacher (father figure) could give as boys try to construct images of themselves as they want to be.

Remarkable changes in the development of conscience occur in the 10 to 13 year old period. The boy's concepts of rightness and wrongness tend to be modified in terms of gang concepts. The child in early puberty still has the parental pattern of right and wrong although there is a strong drive to personal fulfillment and emancipation from parents. As puberty proceeds the child takes over the pattern of values of fellow adolescents and loses his slavish dependence on parental values.

Next step in the maturation of conscience is when the individual emancipates himself from peer group standards and finds his own values for himself. This is the stage of powerful religious conversions. The conversions are substituted to give him unity and a feeling of certitude. Emancipation from parents is never completed at any age and is always partial for everyone.

The parent of an adolescent is in a difficult position. He is on the receiving end of the child's negative attitudes—whatever he does or says is wrong as the adolescent swings from one pole to another before reaching stability. The young person needs to be sure of his parent's support and advice when asked for and the parent needs to allow him freedom to make his own decisions.

Most delinquents and criminals with weak conscience structures have had contact affection associated with early visceral satisfaction. Their conscience has been warped later in childhood by the rejection or indifference of one or both parents. These children come to reject parents' attitudes and authority and then come to reject all other authority. They turn to the gang for acceptance. The gang is often composed of boys with similar problems of parental rejection who have now substituted gang concepts and authority.

Another type of situation leading to faulty conscience development is the child from a home whose parents do not have contemporary social values to transmit. Hawaiian culture, with little insistence on sex taboos and property rights, is an example of a subculture which tends to produce delinquents because certain of the parents' social values are not acceptable in the prevailing contemporary culture. The crimes of these delinquents are casual and not of the violent and vicious sort produced by the true psychopath.

The case of an 8-year-old boy who developed temper - tantrum - like paroxysms was discussed chiefly to show the diagnostic value of the electroencephalogram. The test revealed dysrhythmia caused by psychic equivalents closely related to epilepsy. Brain waves recorded by E.E.G. are generated from the surface of the brain. Injuries or tumors located near the surface change the pattern of normal electrical activity. Interestingly enough, the only functional condition the E.E.G. is capable of identifying is the psychopathic personality, the fellow without a conscience, whose prefrontal area recordings are characteristically changed.

The final meeting of the institute opened with a discussion of puberty and adolescence. The principle causes of death in early adolescence are accidents, cancer and rheumatic fever, with tuberculosis still taking a heavy toll in late adolescence. This period was seen as full of psychic and physical changes which tax every resource of the young person and may account for the breakdowns into tuberculosis or rheumatic fever. Young people of this age need extra rest and nourishment. The need for high protein diet continues through adolescence. Unfortunately in adolescence, where medical supervision is so badly needed, it may often be neglected by parents.

Case discussion presented by the Bureau of Sight Conservation, the public health nurse, and Dr. Lynn centered on a 19-year-old boy who had poor vision due to chorioretinitis. The father had left the family and this boy had come to be mother's helper and overly dependent. He was socially maladjusted, fearful of asserting himself, shy and had a good deal of resentment of his mother's domination. Psychiatric treatment was directed toward building up his ego structure—a

job which required separation from the mother in a place where he could live an independent life. He learned to box successfully and to overcome his fear of physical force. This adolescent, whose self confidence had been crushed, would probably not have been able to emancipate himself from his mother without outside help. His medical condition, chorioretinitis, is a common eye condition in the Territory. Careful medical workup is needed to determine the etiology. Chorioretinitis often accompanies a systemic illness such as syphilis, tuberculosis or toxoplasmosis.

With this meeting the Child Development Institute was concluded.

STUDENT NURSE ORGANIZATION

In September 1948 the idea of forming an organization of student nurses was initially suggested at a meeting of the Nurses' Association, Territory of Hawaii. Then in December of that same year, Miss Elsie Ho was appointed by the president of NATH to guide the student nurses in organizing an inter-school group. The suggestion was accepted and discussed by the schools of nursing.

In January 1949 the representatives of St. Francis Hospital and The Queen's Hospital Schools of Nursing, believing that the organization of students would promote a better understanding among its members and strengthen the bond between the schools, met and elected the officers.

The chief objective of the organization is to promote further friendship among the students of the accredited professional nursing schools through social and educational activities, and to prepare for organizational work.

Active membership is open to all students of both schools of nursing. However, associate membership is limited to one instructor from each school of nursing and one lay advisor who is selected by the organization.

Our present lay advisor who holds a neutral position and gives impartial advice is Mr. J. Edwin Whitlow. Besides being an active member of our community, Mr. Whitlow is president of two well-known business colleges in Honolulu, the Honolulu Business College and the Phillips Commercial School.

The annual dues are $0.25 per person and are collected at the initial term of each school year. The president and five representatives from each school of nursing constitute an Executive Council. The meetings are held monthly, the place being rotated between the two schools of nursing.

The new officers for the year 1949-50 are:

President, Miss Helen Goshi, The Queen's Hospital School of Nursing
Vice President, Miss Evelyn Kimura, St. Francis Hospital School of Nursing
Recording Secretary, Miss Emily Brown, St. Francis Hospital School of Nursing
Corresponding Secretary, Miss Katsuko Takiguchi, The Queen's Hospital School of Nursing
Treasurer, Miss June Okuhama, The Queen's Hospital School of Nursing
Committee Chairmen:
Educational and Publicity, Miss Blanche Crivallo, St. Francis Hospital School of Nursing
Constitution and By-Laws, Miss Cecilia Wong, St. Francis Hospital School of Nursing
Social, Miss Betty Yamaguchi, The Queen's Hospital School of Nursing

Plans for future activities have been tentatively formulated. The first inter-school activity was a "House Party" for the purpose of getting better acquainted and to promote further friendship among the students, held in December at The Queen's Hospital School of Nursing.

Betty Yamaguchi, *Reporter*

PROGRESS REPORT FROM THE PRACTICAL NURSE TRAINING COURSE

During the last year the Practical Nurse Training Course established an affiliation with Hilo Memorial Hospital. This enables Hawaii students who so desire to receive practical training there except for the three months' basic instruction, six weeks' tuberculosis nursing, and three weeks of home nursing. As soon as the new Puumaile Hospital is completed, a tuberculosis nursing affiliation may also be established. It is hoped that when a sufficient number of students from each island are enrolled in future classes, similar affiliations may also be set up on Maui and Kauai. This will be necessary if the course is to expand for the training of a larger number of students.

Plans are also being made for a night class for employed hospital personnel, men and women who, because of economic necessity, are not able to enroll as full time students. The entire course will probably be two years in length with four class hours per week. The employment experience will be considered as practice areas for the course.

To date, there have been 86 graduates of the ten months' training program since the school first began two years ago. All of these have successfully passed the National League of Nursing Education examination and have been granted Territorial licenses. Of these graduates, many are employed on Oahu at Maluhia, St. Francis, The Queen's, Kuakini, Kapiolani, Leahi, Territorial and Wahiawa General Hospitals; on Hawaii at Hilo Memorial Hospital; and on Kauai at the Wilcox Memorial and Waimea Hospitals.

Mrs. Marjorie Elliot, Instructor in Charge of the Practical Nurse Training Course, located at Washington Intermediate School, was granted a six weeks leave during the fall to enroll in a Workshop at Wayne University College of Nursing, Detroit, Michigan, on teaching practical nursing. Work centered around specific problems and observation in Michigan's School of Practical Nursing. In Mrs. Elliot's absence, Miss Marie Sharp, recent graduate of the five-year nursing program of the University of California, joined the staff to assist Mrs. Myrtle Schattenburg in carrying on activities of the school.

NURSES' STUDY GROUP ORGANIZED

In October a group of 36 public health and institutional nurses interested in tuberculosis nursing and technics met at Mabel Smyth Building to organize a study and discussion group. Miss Agnes Peterson was elected chairman.

The group will be known as the Wahine Sinclair Club and will meet on the third Friday of each month at 7:30 p.m., meeting areas to be announced. All phases of tuberculosis control and treatment will be covered beginning with public health aspects, case finding methods, diagnosis, hospital care and treatment, post-hospital follow-up and rehabilitation.

The November meeting was held at Lanakila Health Center. The discussion included the physical set-up of Lanakila—the Register, Survey and Clinic; the scope of the tuberculosis problem; points in case finding and reporting to the Register and presentation of a case giv-

ing the method of discovery, the history, diagnosis, recommendations and disposition of the patient.

Anyone interested in tuberculosis is cordially invited to attend the meetings. For further details contact Miss Agnes Peterson at Lanakila Health Center or Miss Elsie Ho at Leahi Hospital.

ANA ANNOUNCES COMPLETION OF SCHOOL DATA SURVEY

A School Data Survey has been completed by the Subcommittee on School Data Analysis, appointed by the National Committee for the Improvement of Nursing Services, a committee of the Joint Board of the six national nursing organizations. The survey was made to review the educational facilities of the nation's basic program in nursing. Data on the source of supply for all nursing services—the basic programs in nursing—were needed before any sound planning for the improvement of nursing services could be started.

Questionnaires were sent to schools of nursing in the United States, Hawaii, and Puerto Rico, in March 1949. The amazing response from 96 per cent of the nation's 1195 existing schools of nursing is in itself an achievement of which the nursing profession can be proud. The committees cannot praise enough the activities of the state nursing organizations—especially the State Leagues of Nursing Education and the State Boards of Nursing Education and Nurse Registration—and allied professional groups in helping to promote the splendid response of the schools.

Schools provided two sources of information: (1) the data returned on the questionnaires, and (2) school bulletins and literature. Supplementary information used included data on education facilities published by the American Hospital Association and the American Medical Association. Every effort was made to use objective information on measurable aspects of basic programs.

In addition to the initial use of the school data, the study provides a wealth of material on resources of nursing education facilities which will be invaluable in regional planning for nursing education to meet the needs of nursing services. It will be useful also to similar planning groups in states and communities. General statistical data will be available to other professions.

A classification of the basic programs in nursing of the nation has been made, and it is based on the findings of the school data. Known as the Interim Classification of Institutions Offering Basic Programs in Nursing, it has been approved by the boards of the six national nursing organizations. It was published in the *American Journal of Nursing* in November.

The classification consists of two groups into which schools have been classified according to their relative national standings based on the school data analysis. The two groups are: Group I which includes 25 per cent of the basic programs in nursing—those with the highest standings, and Group II which includes 50 per cent of the basic programs in nursing—those with the middle standings—and Group II which includes 50 per cent of other 25 per cent of basic programs in nursing—those with the lowest standings and a few programs on which data were not returned.

The classification will be useful to groups interested in the recruitment of more and better qualified students for future nursing services. Counseling and guidance groups, as well as prospective students, in all regions will be helped by such a listing.

Schools of nursing which participated in the survey have received confidential summary profiles together with explanatory letters. The profile showed the school the relative national standing of its basic program in nursing and some of its component factors. It also indicated whether the basic program of the school was included in the classification, and if so, in what group it had been classified.

We are happy to report that Queen's and St. Francis came in Group I—those with highest standings.

CONCERNING THE PROGRAM FOR THE IMPROVEMENT OF NURSING SERVICES

There has recently come to the attention of the American Nurses' Association evidence of some misunderstanding concerning the purposes and policies of the program for the improvement of nursing services. This program is being carried on by the National Committee for the Improvement of Nursing Services, which is composed of the representatives from the six national nursing organizations (whose boards of directors are widely representative of all geographical areas and groups of nursing), and other allied professional groups.

One of the points of criticism seems to be based on the belief that a new educational program for nurses is being promoted which would have the effect of transferring all nursing education to degree programs and would result in the abolition of diploma programs. This is entirely erroneous.

It is inevitable and, in fact, desirable, that changes in standards of nursing education will occur, as they have occurred in the past. The American Nurses' Association has always been in the forefront of the efforts to improve nursing education and in the platform approved by the House of Delegates of the American Nurses' Association at the June 1948 Biennial, the following paragraphs appear:

> D. Promotion of the principles of education already carried out in other professions of integrating professional schools of nursing into the framework of institutions of higher education.
>
> E. Promotion of federal and state and local aid for nursing education to assist in establishing schools of nursing on a sound financial basis.

This obviously does not mean the transfer of all nursing education to degree programs, but simply implies the greater use of the instruction and facilities of institutions of higher education for the improvement of diploma schools. Nor does it mean that there is anything in the program which would affect the professional status of nurses who have previously qualified as Registered Nurses. Every state in the United States has a Nurse Practice Act which protects the Registered Nurse regardless of what standards may be thereafter established. Even if a Registered Nurse should never receive additional education, she would still be registered in her state provided, of course, that she renews her current registration periodically where such renewal is required.

Considerable publicity has been given to the so-called Brown Report and this report has been attacked as calling for the end of hospital schools of nursing. This is also entirely erroneous. The Brown Report, a significant one, was made at the request of the National Nursing Council with funds granted by the Carnegie Foundation and was published in 1948 under the title, "Nursing for the Future." Dr. Esther Lucile Brown, the Director of the study, prepared the report which was based upon her observations. This report has not been adopted by any national or state nurses association as a program for action. Unquestionably a great deal of study has been given, and will continue to be given, to this publication and to others of a similar nature. However, this does not imply blind acceptance of the recommendations. The discussion and recommendations by Dr. Brown

should not be confused with the program and policies of the American Nurses' Association.

Some nurses have expressed concern that the program for the improvement of nursing services will have the effect of placing the nursing profession under the control of the Federal Government. To substantiate this, in several instances attention has been called to U. S. Senate Bill 1453, which is a bill to provide an emergency five-year program of grants and scholarships for education in the fields of medicine, osteopathy, dentistry, dental hygiene, public health and nursing professions. The American Nurses' Association, in addition to other national professional groups, including the American Medical Association and the American Hospital Association, appeared at the Senate hearings in general support of this legislation. In doing so, the American Nurses' Association was carrying out the plank in its 1948 platform quoted above; namely, the "promotion of Federal and State and local aid for nursing education . . ." A careful study of the bill fails to disclose any threat, expressed or implied, of control of the categories of professional education by the Federal Government. In fact, such control is specifically prohibited by the bill. After authorizing federal financial assistance to schools of nursing which meet qualifications prescribed by the bill, section 382(a) provides as follows:

> . . . nothing contained in this part shall be construed as authorizing any department, agency, officer, or employee of the United States to exercise any control over, or prescribe any requirements with respect to, the curriculum or administration of any school, or the admission of applicants thereto.

The program of the American Nurses' Association does not contemplate the abolition of diploma programs in nursing. However, as with all other professional organizations, one of the primary interests of the American Nurses' Association is the constant improvement of nursing education and nursing service. Such improvement must naturally be evolutionary rather than revolutionary. The program is not one to destroy, but to build up the profession of nursing and its schools.—*(ANA public information release 10/49.)*

FACTS ABOUT NURSING, 1949

Information on important developments in nursing, contained in "Facts About Nursing, 1949" was released in November.

An important feature of the new *Facts* is the data on the inventory of professional registered nurses conducted by the American Nurses' Association in 1949. The population per active professional registered nurse is shown by a shaded map and reveals that in 1949 five states had only 1 nurse for 995-1997 population while five states had 1 nurse for every 270-324 residents.

"Facts About Nursing, 1949" reveals that the number of professional nurses in hospitals and schools of nursing increased 16 per cent from 1947 to 1948. In addition, the number of professional nurses employed by government agencies rose in 1949, compared with the previous year.

On the other hand, enrollment of student nurses on January 1, 1949, totaled 88,817, a drop of about 3 per cent from the 91,643 students enrolled on January 1, 1948. The 1949 enrollment is about the same as the total on January 1, 1941.

The new edition of *Facts* contains a wealth of information on distribution, counseling and placement, and employment conditions of nurses which has been collected from the American Hospital Association, the American Medical Association, the United States Public Health Service, the American Red Cross and various governmental agencies. Additional material was provided by the statistical departments of the national nursing organizations which cooperated in compiling this book.—*(ANA release.)*

COMPLETE INVENTORY OF PROFESSIONAL REGISTERED NURSES AVAILABLE

A complete inventory of registered professional nurses in the USA and its territories is being released by the American Nurses' Association at the request of the National Security Resources Board according to Pearl McIver, President, American Nurses' Association, and Ruth Freeman, Chief of the Nursing Section of the National Security Resources Board.

The inventory of nurses, which has been secured by the ANA through cooperation with state nurse-licensing boards and state nurses' associations, provided data on the number and location, age, marital status, responsibility for dependents, whether the nurse is actively engaged in nursing, and the field of employment and position, type of preparation and experience in special fields.

The inventory is hailed by nurses and other leaders in the health services who are concerned with planning to meet the present enormous and increasing demand for nursing service. Effective planning requires accurate data regarding the number of nurses in active practice. The total licenses issued to nurses is misleading in estimating available nurse power since many nurses maintain current registration in more than one state and others continue current registration even though not actively practicing nursing.

"Maintaining the census of nurses on a current basis will become a permanent routine procedure and will enable professional nurses to more effectively initiate measures for increasing nursing strength to meet all needs," said Miss McIver.

Paper bound copies are available from the American Nurses' Association, 1790 Broadway, New York 19, N.Y., at $1.00 per copy.—*(ANA release.)*

APPOINTMENT ANNOUNCED

Appointment of Nancy L. Haney in September as assistant to the public relations director of the Committee on Careers in Nursing has been announced by Theresa I. Lynch, chairman.

Miss Haney was associate editor of the Publications Department of the YWCA, National Board, for two and a half years. Her work at the National Board included editing books and pamphlets, writing program material and assisting with the teen-age program directors' publication, *The Bookshelf*, and the National YWCA magazine, *The Woman's Press*. Miss Haney's previous experience has included work on a children's magazine, radio script writing, and acting as New York advertising representative for a Chicago fashion publication.

Miss Haney obtained a B.S. in Journalism at the Medill School of Journalism, Northwestern University, and, while doing graduate work in journalism and sociology at the University of Wisconsin, she was on the English Department's faculty. She is job representative for the New York City Chapter of Theta Sigma Phi and a member of the Senior Activities Committee, Bronx, YWCA.—*(Committee on Careers in Nursing release.)*

MISS JONES LEAVES US

Miss Virginia Jones, our president for the last few years, has decided to leave us for awhile and go to

school on the mainland. Of course, we will miss her greatly and she only plans to be gone from February to September, 1950. We all wish her well in this venture and know she will return to us in the fall full of many bright and stimulating ideas. Good luck and Aloha, Miss Jones, from the nurses of Hawaii.

COMMITTEES FOR 1950—NURSES' ASSOCIATION TERRITORY OF HAWAII

Committees for the coming year have been appointed and are hard at work on their individual tasks. With their concentrated effort and the assistance of all nurses, we hope to really make the year 1950 an outstanding one for our association.

The committees are:

Constitution and By-Laws
Sister Mary Laurine, *Chairman*
Carolyn D. Englesby
Kiyoko Ota
Kathleen Keating
Alavana Chang

Counseling and Placement
Esther Stubblefield, *Chairman*
Virginia Ahrendt
Elvira Hamilton
Esther Higuchi
Inez Smith
Sister Mary Albert
Patience Martelon
Mabelclaire Norman, *Ex. Sec.*

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Eleanor Enomoto
Virginia Doyle
Vera Rosemond
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Etta Hou Chun, *Chairman*
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Virginia Barnett
Esther Conroy
Helen Williams

Margaret Jones Memorial Fund
Lucille Otto, *Chairman*
Inez Lange
Helen Morikawa
Margaret Makekau
Rose Schlief
Helen Gage
Mary Stanley

Membership
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Mary Jean MacDonald
Miyoko Masunaga

Nominations
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Clara Mitchell
Helen Gage

Nursing Information
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Loretta Schulfr
Margo MacDermid
Nancy Sanjume
Margaret Gilliland
Mary Chfek
Myrna Campbell
Carol Gill
Violet Buchanan
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Alice Alvord
Thelma Hensley

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Agnes Yanagihara
June Hohn
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Lillian Jonsrud
Frances Kupau
May Bowron
Jane Oki

Research Project Committee
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Elaine Johnson
Margaret Wong
Kay Nichols
Mabel Coleman
Julia Lombard
Florence Knapp
Mabelclaire Norman, *Ex. Sec.*

Committee to Investigate Advisability of Requiring Annual Chest X-rays
Alice Scott, *Chairman*
Lily Tomita
Isabelle Medeiros
Ethel Edgar
Virginia Kingsbury

Special Committee to Promote Attendance at Biennial in San Francisco
Miyoko Azuma, *Chairman*
Margaret Miller
Aiko Yano
Grace Kwon
Isabelle Gonsalves
Claire Carra

Inter-Island Nurses' Bulletin
Violet Buchanan, *Editor*

HAWAII LEAGUE OF NURSING EDUCATION

At the annual meeting of the Territory of Hawaii League of Nursing Education held in September 1949 the following officers were elected.

President for a term of one year, Mrs. Arlene Thompson, Honolulu.

Vice-President for a term of two years, Miss Mary V. Cheek, Queen's Hospital.

Secretary for a term of two years, Mrs. Rae Keleher, Honolulu.

In November 1949 Miss Virginia Null of Queen's Hospital was appointed by the Board to be Treasurer for the remainder of the term expiring September 1950, replacing Miss Jeannette Seo.

ADDRESSES WANTED

Will anyone knowing the present whereabouts of the following nurses please call the Nurses' Association Office, 68630:

Betty Chun, R.N.
Nettie P. Irwin, R.N.
Eleanor F. Martin, R.N.
Florence Miller, R.N.

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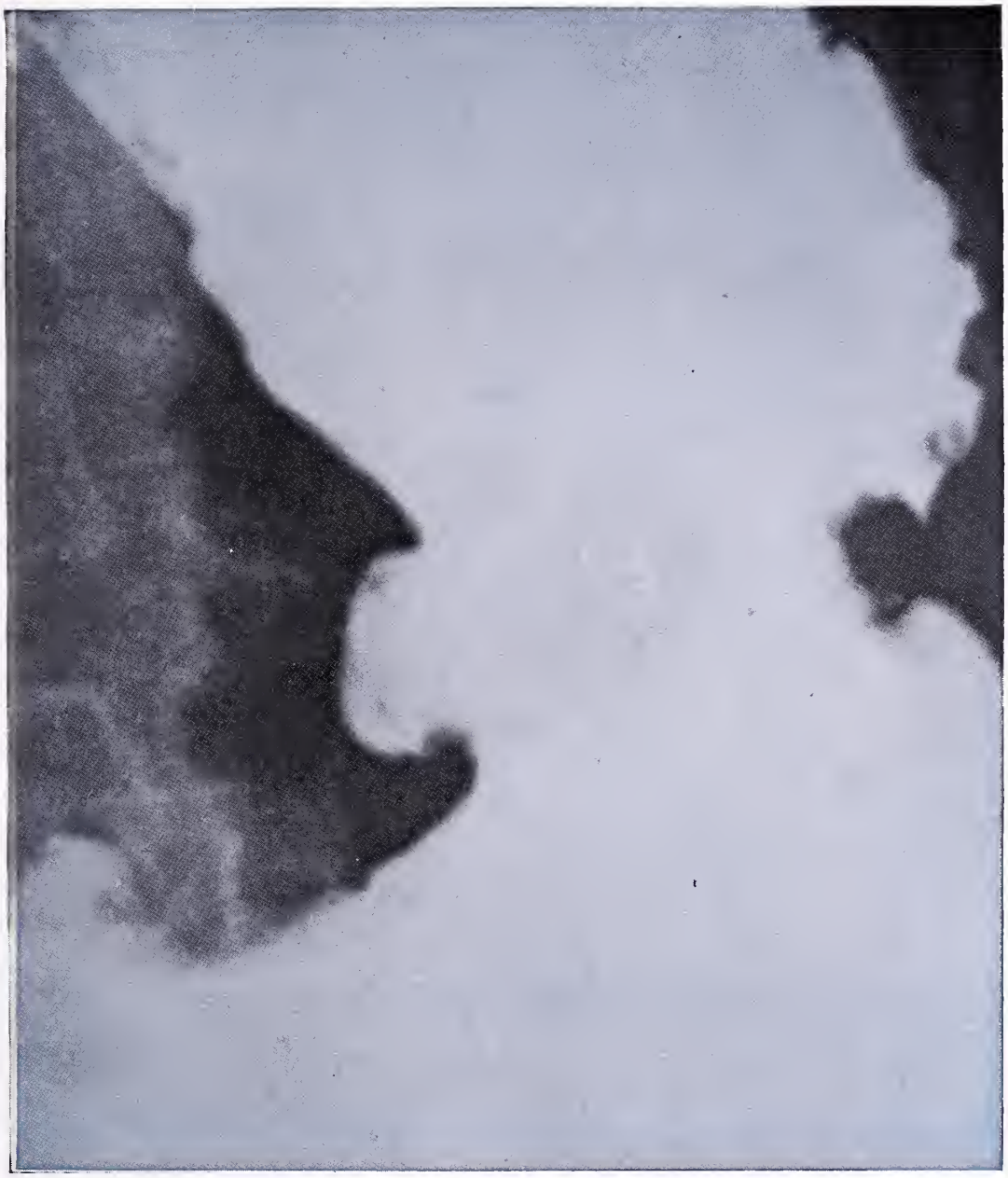
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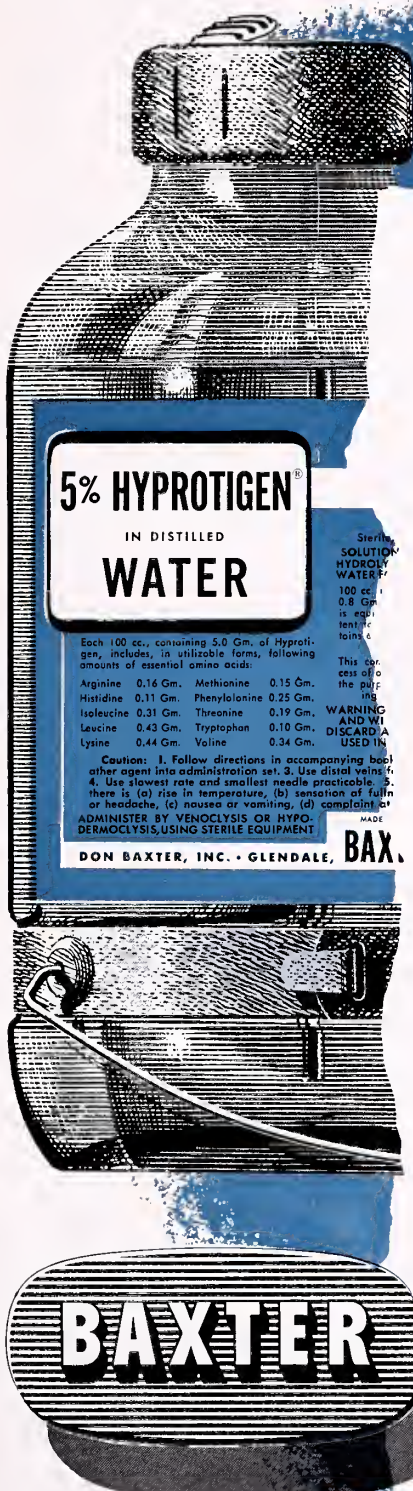
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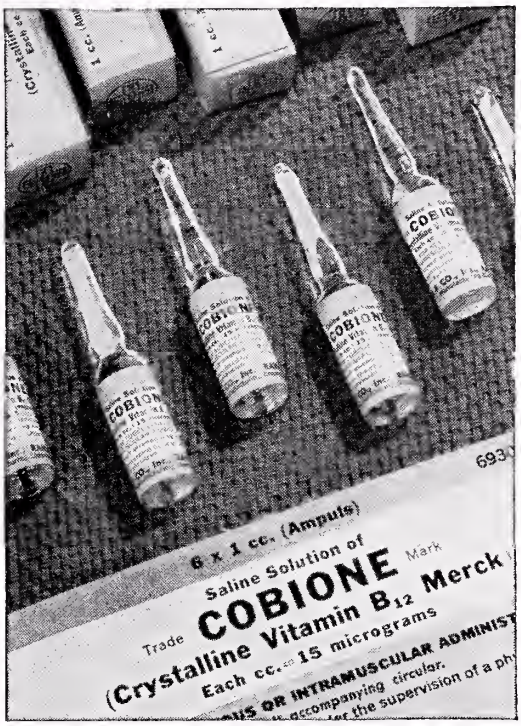
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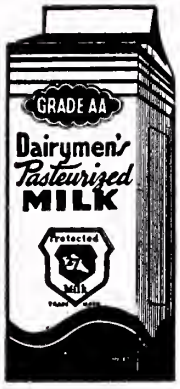
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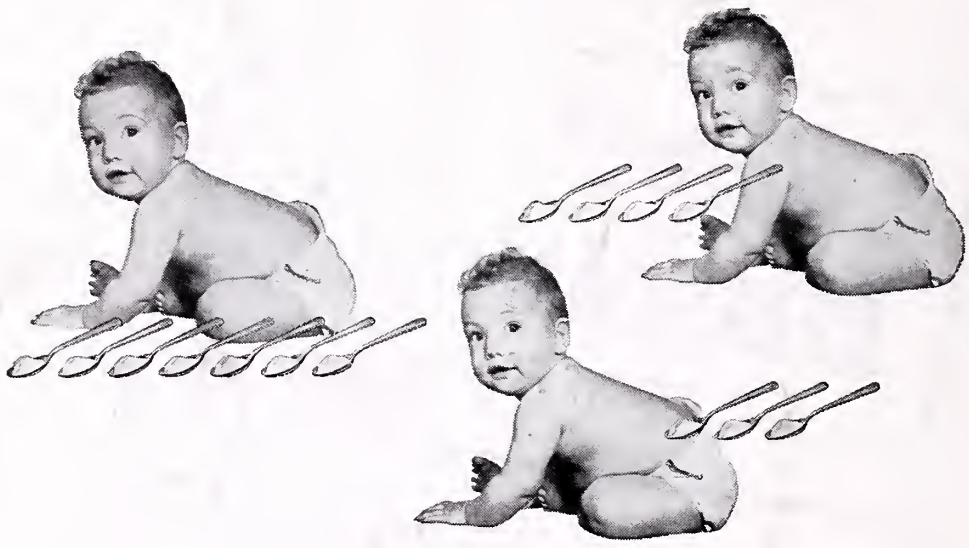
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HAWAII MEDICAL JOURNAL

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AFTER THE A.M.A. MEETING

THIS JUNE

SEE PAGE 243

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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

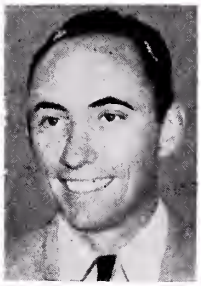
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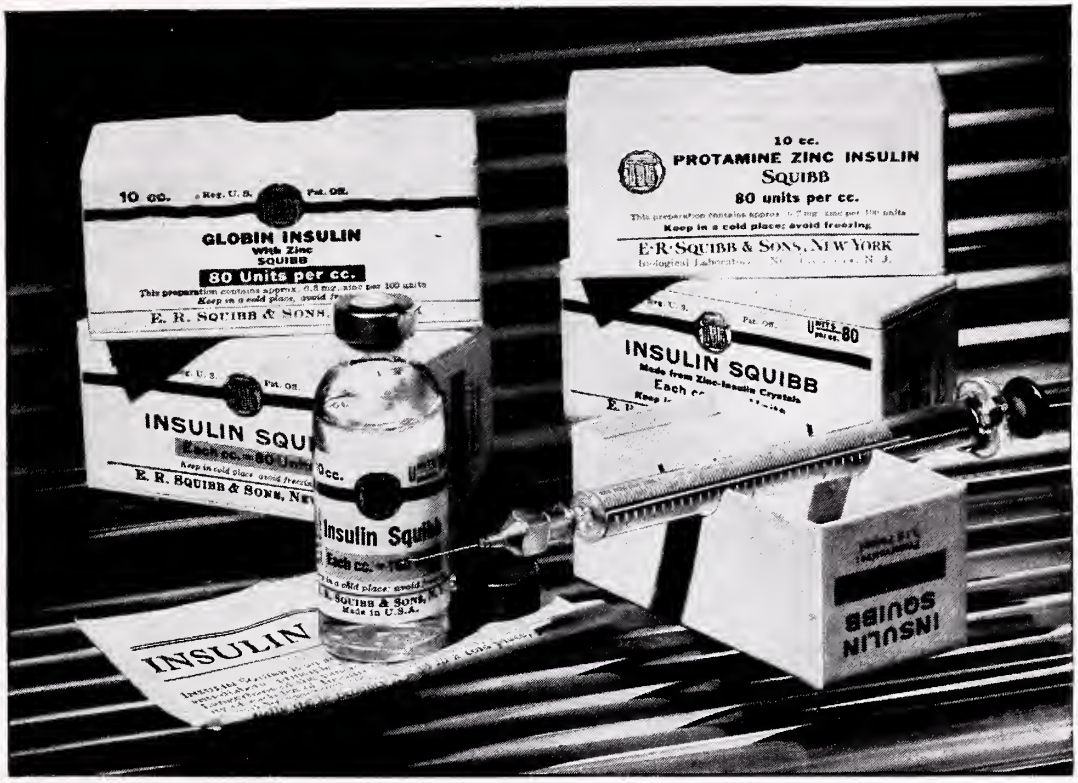


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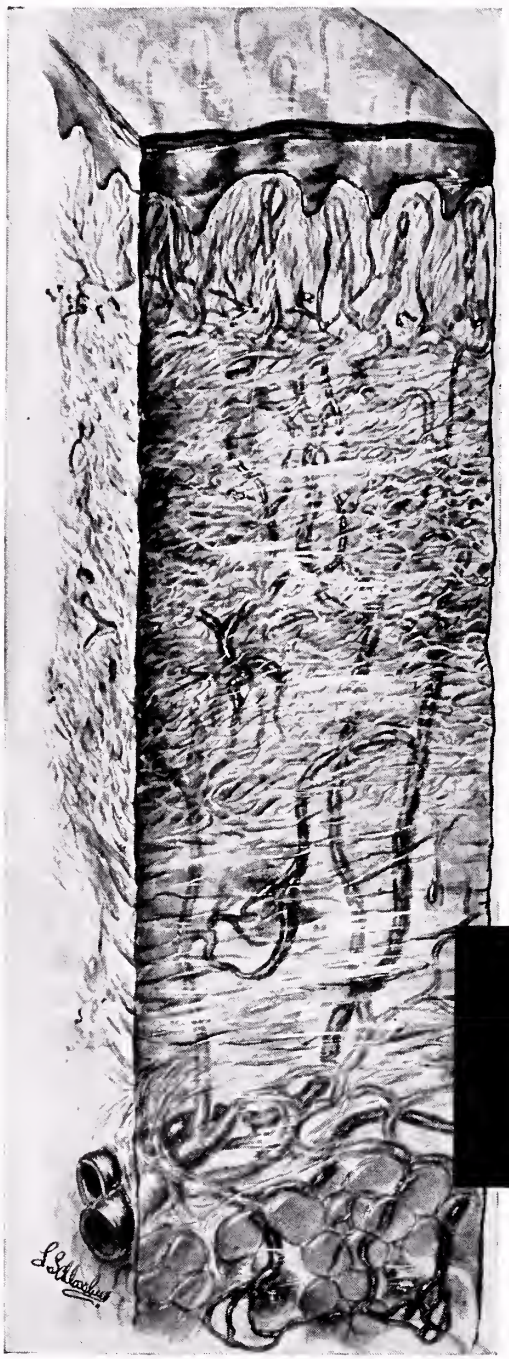
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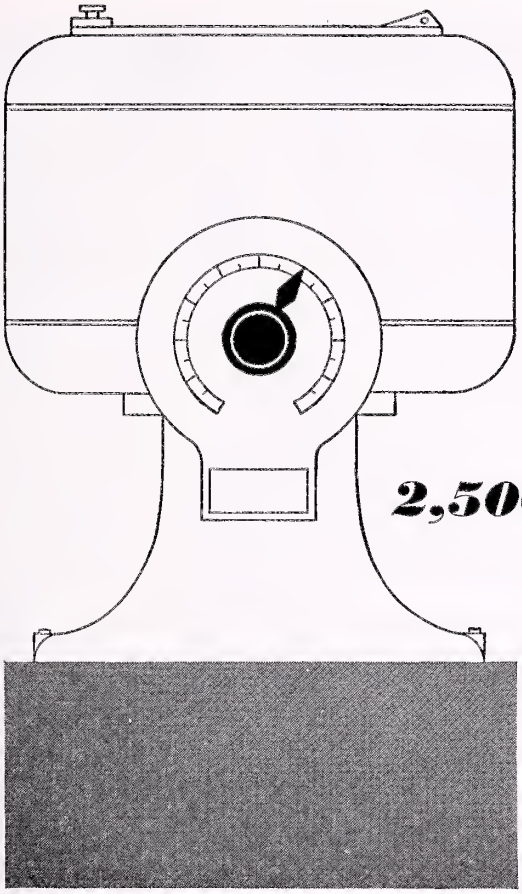
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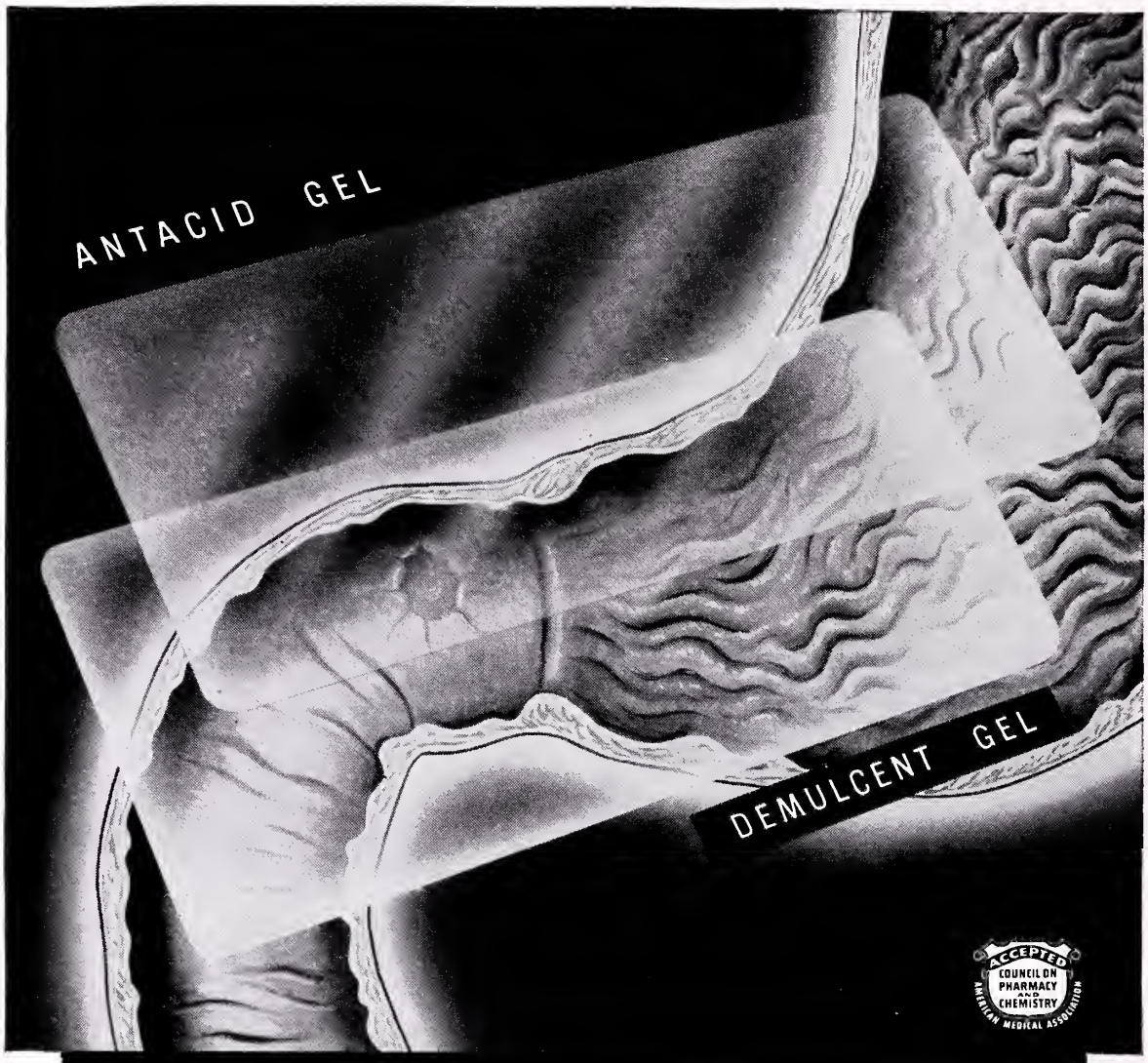
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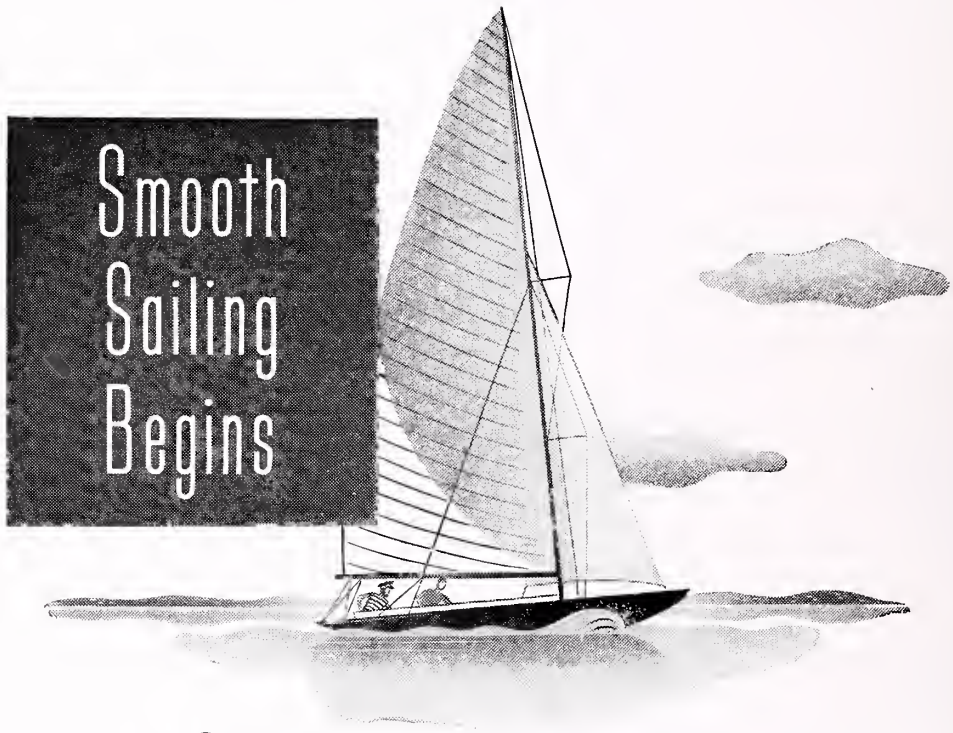
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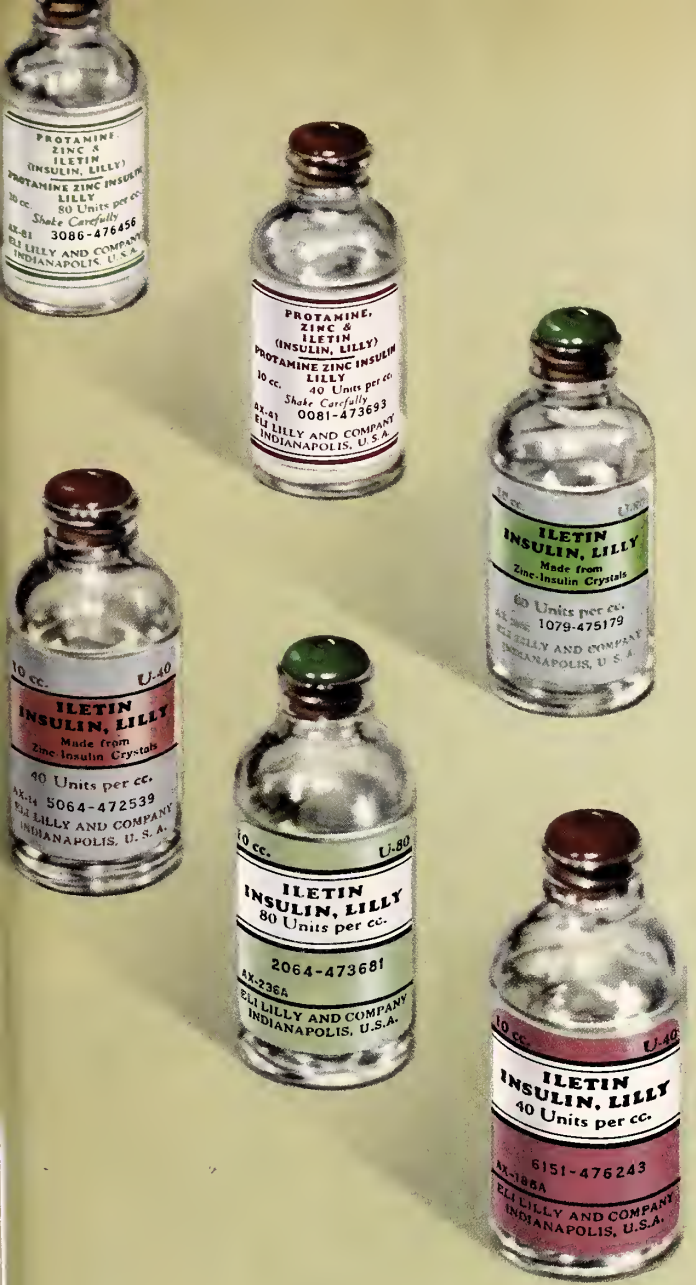
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When a Plantation Hospital is Discontinued

P. H. LILJESTRAND, M.D.
AIEA, OAHU

THIS is addressed only to my fellow doctors, but even so, should not be construed as an attempt to "tell" them anything. In fact, it is really addressed only to those doctors who may find themselves in a situation such as mine when the plantation collapsed or to those who are like another doctor, who tells me that it has been pointed out to him that the net loss on the medical service for the year happens to be almost exactly equal to the net loss of the plantation. He feels under implied pressure to prove the justification of the loss on the medical service or else find a way to eliminate it. Along this line our unfortunate experience has already been of practical value to one plantation.

On a few days' notice, the medical service and hospital of the plantation at Aiea were closed. The sudden loss of livelihood affecting three and one half thousand people and the extreme uncertainty concerning the future resulted in a stunned community, paralyzed for a time by emotional tension. There was an immediate outcropping of functional complaints like stomach pains. However, within a few weeks most of the workers had been absorbed by other industries and the community was going again, but under an entirely different routine of living.

As for the hospital itself, one minute after it was closed by the plantation it was reopened as a private enterprise and was soon taken over by an association formed of interested citizens of the community. However, it could operate only as a private hospital, making charges for all patients, and no longer operating a general medical service as before. Gone were the plantation out-patient clinics, the field nurse with her follow-ups, health surveys, health education, and regular physical examinations. A third of the men went to work for the neighboring plantation and thus continued to come under plantation medicine. For the remainder, systematic medical care vanished over night.

The result of this cannot be demonstrated statistically because all basis for statistics disappeared. That the general health service had disintegrated, however, was continually obvious. Diabetics would show up after a long period of no insulin or urinalysis. Luetics failed to continue treatment because there was no camp nurse to remind them and to check on them when they failed to appear for treatment. The use of tetanus anti-toxin rather than tetanus toxoid gradually increased because fewer and fewer of the injured children could show any evidence of having had toxoid immunization, as all had under the plantation. Time and again patients were brought after illness had become serious with the apologetic explanation that since it was now necessary to pay for all visits to the doctor they were avoiding the doctor as much as possible. This is what one would expect, and even if statistics were available one would not need to belabor the point further. Many expressed the thought that they had never consciously appreciated the plantation medical service until it was irretrievably gone.

The character of the hospital census changed abruptly. We had been accustomed to having a good proportion of chronic and relatively mildly diseased people hospitalized. It had been part of the plantation policy to be generous with prophylactic hospitalization. Now suddenly people in this class could not afford hospitalization. The chronics went home or to the city hospital at Maluhia or to old peoples' homes. Those with milder diseases and many with severe diseases stayed home. Hospitalization became acceptable only when the situation was serious or desperate, so our census became mostly of that character. As a result, a numerical census the same as before now means much more work for the staff, more nurses, and more pressure on the doctor. Everyone that we deal with is sicker.

Our picture was the reverse of what was to happen in England when free medical care was to become suddenly available. Their calls and hospitalization shot up. Ours shot down. However, we observed that two groups of patients did not change. There are those who have to be dragged to a doctor even when service is free, and there are those neurotics who go all the time, even if they supposedly pay. This group continued to plague us as before. If they really did pay some bills, it took some of the pain out of seeing them. But many of this class regard unlimited care as some sort of birthright and make no effort to pay, or else they figure out various ways of getting it

Read before the annual meeting of the Hawaii Association of Plantation Physicians, Puunene, Maui, November 19, 1949.

free, as through the Department of Public Welfare.

Since being on our own, we are led by our financial experience to conclude that a hospital that can maintain an average census of 22 can do very well with the help of the Territorial subsidy, provided that all charges are realistic, or at least comparable with those of large hospitals, whose charges serve as a handy yardstick.

Rational charges are important if hospital financing is to make any sense. The charges must approach the actual cost. Incompetent accounting is misleading. There was a striking illustration reported from one hospital wherein it was thought that cost per patient day was from $3 to $5 and outside patients were charged accordingly. It was a jar to all when actual cost figures showed the cost to be above $20 per patient per day. To get correct figures you must avoid cheating by charging yard men to the plantation maintenance department, plumbing repairs to the plumbing department, etc. When we were thrown on our own we were forcibly impressed with these things, since we had to start paying regular commercial rates for plumbers, electricians, ambulance repairs, and the like.

We conclude that operation of a small hospital is not only feasible but is sometimes desirable. Fallacious is the common belief that because a thing is bigger it is better. It is not necessarily true of the quality of care in hospitals. In fact, the staff of a smaller place, being more intimately acquainted with each other and with the patients may very well give superior service. We make no claims at all for either physical equipment or service, yet we have a steady trickle of Honolulu people who go out of their way to find a little country hospital in order to avoid what they rightly or wrongly feel is the cold, impersonal, mechanical atmosphere of the large hospitals. Dr. Rothwell quotes one of his nurses from the mainland, who said that in that small hospital,* for the first time she felt concerned to make it her business to see to it that everyone lived at least until she got off the shift.

Even financially we have been surprised to find that our cost per hospital day is not above that of the large city hospitals. True, we lack much equipment that they provide. We simply do not attempt to treat patients who require it. Fortunately the vast majority of patients can get along without piped anesthesia gases, x-ray therapy machines, iron lungs, and electro-encephalographs.

Fine walls do not necessarily make a hospital. The personnel is the thing. From a very small hospital in Arabia the famous medical missionary, Dr. Shepherd, reported a large series of operations for strangulated hernia with remarkable results. A visiting critic, sensitive only to visible equipment and unable to appreciate results, complained about the mud floor in surgery. Dr. Shepherd's only answer: "Out here we don't operate with our feet."

This sort of thing may become important as an aftermath of the Meister report. There is now being promulgated an elaborate 70 page set of regulations for hospitals that if enforced immediately would put every private hospital in the Territory out of business. (The original edition called for: all lighting indirect; no wooden floors; no medication, not even aspirin, to be given except on written order of a doctor.) This was temporarily slowed by the Oahu Hospital Council but it is not dead. I do not oppose regulations that are obviously in the public interest, but they should be brief and sensible. Like Europe, however, we are on our way to regulating ourselves to death. (Because of things like this, every hospital that hopes to survive should immediately join the Hospital Association of Hawaii, so as to be informed of insidious developments.)

We conclude that if your hospital is more than twenty minutes from a better available hospital and you have the ambition to keep it going, you can do so if you:

1. Get competent, accurate figures on your costs.
2. Set up your charges on a realistic cost basis.
3. Reset the insurance charges so that the medical insurance plan can afford these rates.
4. Divorce the hospital from the plantation as Kahuku has done, in order to make it a true community hospital.
5. Be included in the Territorial Subsidy. This is only just. City corporations do not provide hospitalization for their employees at a loss. They let the community as a whole do it. The sugar plantations, who certainly pay their share of taxes, should do the same.

If you take these steps and have an average census of 22, you can break even or come close to it so far as hospitalization is concerned.

General medical care aside from hospitalization is of course a separate problem. This should be, and supposedly is, paid for by the medical insurance plan. The only question here is one of setting the rates high enough to realistically pay the bill. To achieve this, premium rates will undoubtedly have to be increased. For the people to know and pay the actual cost would be a good thing. With perquisites and paternalism supposedly eliminated, it is rather inconsistent to be giving in

* Kahuku Hospital

the medical plan a large hidden perquisite that no one appreciates. Before, medical service was free and the workers knew it. Now a good part is still free and the workers think they pay for it.

We have now cared for some of the same people under circumstances varying from complete free service through various partial insurance plans to the traditional complete fee for service system. As a result I feel strongly that there must be made available to all people strong insurance to provide for all major health expense, but I feel just as strongly that some means of part payment must be retained to keep the abusing group cognizant of the cost of the service they are getting. People should get all the medical care they need, but not necessarily all they want. There is a difference. If a man wants extra service, let him earn enough to pay for it, rather than making his more conscientious neighbor pay for it through either insurance or taxation. Whether he be English or I.L.W.U., the simple economic fact must sink in that he cannot demand services and benefits equivalent to another man's full time labor indefinitely unless he produces enough to feed that other man as well as himself.

Medical insurance, like work, should be made readily available. Education as to its desirability should be unbounded. Then those who do not avail themselves should suffer the consequences. Only when their carelessness may harm others should compliance be compelled, for compulsion is degrading and harmful to the human race inasmuch as it encourages the present trend toward protection and coddling of the unfittest. The instincts of the Oscar Ewings for compulsion must be gently curbed if one is to postulate any dignity in individual human personality.

A third component of medical cost, having no relation to hospital losses or insurance plans, is the necessary industrial medicine, the meaning of which has been amplified at this meeting. This is an operating expense of industry which must be properly provided for without confusion with the other two. There is no way to make it disappear.

In conclusion, this easy lesson on how to run a small hospital without much loss may be misleading. It takes a lot of work and worry and involves a lot of medical and legal responsibility. The government subsidy is bound to be scrutinized more and more carefully, and government controls are beginning to go with it. So, all in all, if there is a hospital within a reasonable distance which will handle your hospitalization for you, perhaps you had better let them. You will save a lot of worry and maybe some money, but you probably won't get any better service.

Treatment of Barbiturate Poisoning

CLIFTON C. RHEAD, JR., M.D.
HONOLULU

POISONING by barbiturates is undoubtedly the most common type of poisoning seen by the practitioner in any large community. The number of deaths occurring from barbiturate poisoning, either accidental or intentional, has shown a definite trend upward in the past ten years. Various sources report an average mortality rate of about 6.5 per cent,[1] and in one series the deaths ran as high as 15 per cent.[2]

A disease in which the mortality rate is over 6 per cent warrants attention to the methods of therapy which have proven to be particularly successful. The efficacy of picrotoxin as an analeptic in the treatment of barbiturism, and its safety when properly administered, has been well demonstrated since its introduction for that purpose by Arnett in 1933.[3] A recent study by Watts and Ruthberg[4] advocated the use of coramine in barbiturism. The authors presented a series of 99 cases with 8 deaths in five years. Freireich and Landsberg[5] have presented a series of cases in which patients were treated for acute barbiturism with amphetamine sulfate alone. They report favorable results, with one death in a series of 14 cases.

During the past six years 85 cases of barbiturate poisoning have been treated at the Mental Hygiene Clinic of The Queen's Hospital, with one fatality. All degrees of poisoning are represented in that series, and included are patients who had taken quantities of barbiturates exceeding the lethal dosages. A resume of our method of treatment of such cases is presented here with illustrative histories.

Too often the treatment of barbiturate poisoning, as seen in practice, follows the principle of "too little, too late." The patient who has taken an overdose of barbiturates may give the impression of being only in deep sleep, and unless the respirations are markedly depressed and the patient is cyanotic, the physician may be lulled into a false sense of security. Small doses of the milder stimulants are useless in severe poisoning, and the patient may be near death before the seriousness of the situation is realized.

The symptoms of barbiturate poisoning vary with the amount of the drug taken, and any degree of depression, from mild sedation to deep coma, may be obtained. Severe poisoning may occur when from five to ten times the full oral dose is taken, and fatalities may result when fifteen times the usual dose is absorbed.[2] The common symptoms of acute poisoning are drowsiness, mental confusion, and headache, the drowsiness progressing to profound sleep and ataxia. The pulse becomes weak and rapid, the blood pressure and the temperature fall, and respirations become depressed to the point of evident anoxia or apnea. The skin becomes moist and cyanotic and the pupils first contract and later dilate as anoxia develops. Reflexes become hypoactive, and the urinary output diminishes.[2]

Death from barbiturate poisoning ordinarily results from respiratory failure. In addition to central depression of the respiratory centers, respiration may be further embarrasesd by pulmonary edema or by pneumonia. Pulmonary edema may appear early in the course of acute poisoning by the shorter acting drugs, while pneumonia is a complication occurring during the course of prolonged coma. High concentrations of the drugs cause a depression of the central vasomotor centers, resulting in peripheral dilatation and hypotension. In addition, a direct action of high concentrations upon the capillaries may result in further dilatation and ensuing shock. There seems to be no direct action upon the myocardium or the conduction pathways. The patient with severe poisoning may become oliguric or anuric through both a central effect (possibly by means of depression of the hypophysis) and through hypotension with a resulting diminished renal flow.[2]

Experimental studies indicate that the barbiturates act upon the cortex, the midbrain, and the medulla. Attempts to prove the existence of a selective site of action of those drugs in specific cells of the thalamus and hypothalamus have been unsubstantiated, since data have been presented which suggest that the drugs are found in equal concentrations in all parts of the brain. However, it should be remembered that the depressive action may depend upon sensitivity of certain nerve cells

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[1] Burdick, D. L., and Rovenstine, E. A.: Picrotoxin in Barbiturate Poisoning, Ann. Int. Med. 22:819, June, 1945.

[2] Goodman, L., and Gilman, A.: The Pharmacological Basis of Therapeutics, The MacMillan Company, New York, 1941, p. 141.

[3] Arnett, T. H.: Ephedrine and Picrotoxin Used Successfully in Amytal Poisoning, J.A.M.A. 100:1597, May 20, 1933.

[4] Watts, T. C., and Ruthberg, T.: Coramine (Nikethamide) in Barbiturate Poisoning, Ann. Int. Med. 29:1104 (Dec.) 1948.

[5] Freireich, A. W., and Landsberg, J. W.: Amphetamine Sulphate for Acute Barbiturate Poisoning, J.A.M.A. 131:661, June 22, 1946.

rather than concentrations in the tissues at different sites; hence many questions remain unanswered.[2]

Picrotoxin is felt by many authors[6] to be the analeptic of choice in the treatment of barbiturism. Its site of action is higher in the cerebro-spinal axis than strychnine. In mammals, picrotoxin stimulates the cortex, although its most prominent effect is on the midbrain and the medulla. The analeptic action is striking, and it is the most effective of all the central nervous system stimulants in that respect.[2] When given intravenously, it is rapidly removed from the body, and all traces of it disappear within twenty minutes. Thus, repeated doses must be given for any sustained action of the drug.[2] The antidotal effect of picrotoxin is explained not as a direct reversal of the depression caused by the hypnotic, but as the induction of a combined state of excitation and depression.[5] However, evidence has been presented which indicates that picrotoxin increases the sensitivity of the inspiratory center in animals by as much as 220 per cent.[7]

In the Mental Hygiene Clinic a regimen for the treatment of barbiturate poisoning has been evolved which combines the beneficial analeptic effects of both picrotoxin and amphetamine sulfate, affording the patient the maximum benefits from both drugs. In two recent cases, we have used coramine as an adjunct in the therapy, but we are not yet prepared to make any evaluation of the efficacy of that drug.

It is essential that an adequate respiratory exchange be established immediately and maintained throughout the course of treatment. The patient should be provided with an unobstructed airway, and adequate means of aspiration must be on hand. The airway must be kept clean of secretions, and catheter suction should be employed at least hourly if there is no evidence of obstruction and more often if the need is indicated. Oxygen is administered by means of a mask or properly placed naso-pharyngeal catheter, and artificial respiration may be necessary if the patient is apneic or if respirations are too slow. If analeptic treatment is instituted promptly, artificial respiration ordinarily does not need to be prolonged.

Gastric lavage should be carried out immediately and the stomach contents saved for analysis. Although some authors advise leaving 200 to 300 cc. of magnesium sulfate in the stomach, that is not our practice, since it is felt that the sedative which has already reached the intestine will be absorbed before any action of the magnesium sulfate is obtained, and thus no real benefit results.

Prompt analeptic treatment is instituted immediately upon admission. Picrotoxin is the principal drug used for that purpose, given in doses of 3 to 9 mgm. every fifteen minutes, or larger doses up to 15 mgm. if the patient's condition warrants it. It is continued at that rate until the patient shows signs either of awakening or of intoxication, first manifested by twitchings about the eyes. If the latter is observed, the drug is then given at longer intervals, but we do not hesitate to increase the frequency of administration if the coma shows signs of deepening. Amphetamine sulfate, in doses of 10 to 20 mgm. every hour (or more frequently, if indicated) is used as an adjunct. It has both an analeptic effect and a stimulating effect upon the cardiovascular system, helping to prevent severe hypotension and its resulting complications. If the patient shows evidence of severe cardiovascular collapse, ephedrine sulfate, gr. 3/8 (22 mgm.) may be administered as necessary. Both picrotoxin and amphetamine sulfate are continued until the patient has recovered sufficiently to respond to sensory stimuli.

It is our practice to begin the slow administration of parenteral fluids upon admission to the ward. The beneficial effects are several: an intravenous infusion affords a convenient medium for the administration of the analeptic drugs, and its diuretic action insures the continued excretion of those drugs which are excreted by the kidney (barbital and phenobarbital) as well as insuring continued output of urine. During prolonged coma two liters of 5 per cent glucose in distilled water and one liter of 5 per cent glucose in saline might be considered an average twenty-four hour intake. A Foley catheter should be inserted if it appears that the patient will remain comatose for any length of time.

The problem of adequate nutrition arises in prolonged coma. After the third day our patients are tube fed with a formula that insures adequate carbohydrate and vitamin intake and a positive nitrogen balance.

Good nursing care is essential in the proper treatment of the comatose patient. Attention must be paid to oral hygiene, padding of pressure points to prevent decubital ulcers, frequent turning of the patient, and protection of the patient against injury when motor activity returns.

Pneumonia is an ever-present danger in a patient who is comatose. The origin may be hypostatic or from aspiration, and chemotherapy should be instituted prophylactically in those patients who

[6] Das, S. C., quoted by Goodman and Gilman.[2]
Tatum, A. L., quoted by Burdick and Rovenstine.[1]
Richards, R. K., and Menaker, J. Q., quoted by Burdick and Rovenstine.[1]

[7] Wells, T. A. *et al.*: Effects of Picrotoxin on Electrical Excitability of the Respiratory Center, Proc. Soc. Exp. Biol. and Med. 56:176 (June) 1944.

are comatose for periods longer than eight hours.

It should be pointed out that treatment of the patient's physical condition is only the first step in the treatment of the *whole* person. An individual who has attempted suicide has done so because of an underlying cause, and the wise physician will attempt to help that individual find a better solution to his conflicts if he wishes to ward off similar attempts in the future.

Report of Cases

CASE 1.—The patient, a 23 year old woman, was admitted to the Mental Hygiene Clinic in deep coma. She had a history of having taken approximately 40 grains (2.7 grams) of phenobarbital several hours prior to admission. Examination on admission showed diminished tendon reflexes, no corneal reflexes, shallow and slow respiration (14 per minute), blood pressure 130/80, and a strong and regular pulse (80 per minute).

Analeptic treatment was instituted simultaneously with establishment of an adequate respiratory exchange. Patient received an initial dose of 9 mgm. of picrotoxin intravenously which was repeated in fifteen minutes. She then received eleven 6 mgm. doses of picrotoxin, following which she had a grand mal seizure. At that time additional history was obtained, revealing that the patient was a known epileptic. She was placed on 0.1 gram of Dilantin 3 times daily, and picrotoxin therapy was reinstituted half an hour after the last 6 mgm. dose. She was subsequently given 214 consecutive intravenous 3 mgm. doses of picrotoxin at fifteen minute intervals. During that period she received 76 injections of amphetamine sulfate, 20 mgm. each.

The patient showed a slow response to analeptic therapy, but mumbled incoherently after twelve hours. At the end of thirty-four hours, she responded sufficiently to warrant discontinuation of analeptic drugs. During that period her blood pressure fluctuated from 110/70 to 142/84.

No analeptics were administered for two and one-half hours, at the end of which period the patient had again slipped into a deep sleep from which she could not be aroused. She was given 3 6-mgm. injections of picrotoxin at fifteen minute intervals, following which she received 42 intravenous injections of that drug, 3 mgm. each dose, spaced fifteen minutes apart. Concurrently she received 15 20-mgm. doses of amphetamine sulfate spaced half an hour apart.

Following a seven hour period of treatment, therapy was again discontinued for two and one-half hours, at the end of which time it was reinstituted, and she received 33 3-mgm. doses of picrotoxin and 11 20-mgm. doses of amphetamine sulfate.

An interval of four and one-half hours followed during which no analeptics were administered; treatment was then reinstituted and she received 53 3-mgm. doses of picrotoxin and 18 20-mgm. doses of amphetamine sulfate. Treatment was again discontinued for six hours, but when, at the end of that time, she showed signs of slipping back into coma, therapy was reinstituted and she received 56 3-mgm. doses of picrotoxin and 106 20-mgm. doses of amphetamine sulfate, the latter drug being continued forty-eight hours after the picrotoxin was discontinued.

The patient was comatose for seven days in all. During that period she was tube-fed and received continuous fluids by vein. A total of 1296 mgm. of picrotoxin was administered during the course of treatment. Liebman and Johnson report the successful treatment of a case of phenobarbital poisoning in which a patient who had taken 10 grams of phenobarbital was treated with 2526 mgm. of picrotoxin with recovery. That amount is thought to be the largest amount of picrotoxin administered to a single patient with subsequent recovery.[8]

CASE 2.—The patient, a 46-year-old male, was admitted to the Mental Hygiene Clinic in a comatose state two hours after allegedly having taken 56 seconal capsules in a suicide attempt. On admission he responded slightly to painful stimuli. His respirations were irregular and deep, blood pressure was 144/100, temperature was 98.6° F., and his pulse was 76 per minute. Physical examination revealed no abnormalities except his stuporous condition.

Gastric lavage was carried out, during which procedure the patient received 3 mgm. of picrotoxin and 10 mgm. of amphetamine. An intravenous infusion of 5 per cent glucose in distilled water was started, and the patient received 4 3-mgm. doses of picrotoxin at fifteen minute intervals, at the end of which time the intervals between injections of picrotoxin were lengthened to one-half hour because of marked restlessness. Concomitantly, 10-mgm. doses of amphetamine were given at hourly intervals, but the drug was discontinued after the seventh dose because of a persistent blood pressure level of over 150 mm. of mercury, systolic. That schedule remained in effect for thirty-nine hours, at the end of which period the patient was responding verbally, and analeptic treatment was discontinued. The patient continued to be confused and lethargic for forty-eight hours following discontinuation of therapy, but his further recovery was uneventful. During the course of active therapy, the patient received a total of 138 mgm. of picrotoxin and 70 mgm. of benzedrine.

Summary

The problem of barbiturate poisoning is one which is becoming progressively more important to the physician. However, there has been noticed some hesitancy on the part of some physicians to employ the more potent analeptic dosages which will be of benefit to the patient. Picrotoxin is a drug which, if used in adequate amounts with other supportive means of therapy, will obviate a prolonged illness and may prevent death. Two cases of severe poisoning and outlines of the treatment of those cases have been presented, and a suggested therapeutic regimen for similar cases is described.

[8] Liebman, S., and Johnson, L. W.: Successful Treatment of a Case of Phenobarbital Poisoning with Picrotoxin, Amer. Jr. Psych. 104:280 (Oct.) 1947.

36-37 Young Hotel Bldg.

Psychoanalysis Today

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PSYCHOANALYSIS is both a theory and a method. On the one hand, it is a theory to explain the underlying mechanisms of human behavior. On the other, it is a method of therapy for emotional disorders. Today its progress can be seen clearly manifested in both its functions. As a theory, its effect has been felt not only in various schools of psychiatry or psychology, but also in literature, philosophy, education, sociology, anthropology, and many other branches of the social sciences. Some of these other disciplines have also in turn contributed to a better understanding of psychoanalysis. The infiltration of psychoanalytic thought into everyday life may also be seen in recent trends of movies such as "Seventh Veil," "Dark Waters," "Mourning Becomes Electra," and many others. As a method of therapy, it is used not only by psychiatrists but also in almost every branch of medicine. The contribution of psychoanalysis toward the treatment of peptic ulcer, hypertension and bronchial asthma, and many other allergic conditions are among some of the best known examples.

In its basic theoretic concepts, Freud was the founder of the entire discipline as well as a pioneer in his days. It was he who first saw beyond the immediately accessible, conscious aspect of mental process, the life of the "unconscious." Since then a whole new realm of psychic activity has been uncovered. It was also he who introduced the concepts of "libido," "Oedipus complex," "repression," "sublimation," and many other related terms which have today become catchwords of almost every man on the street. It was he who first outlined the topographic sections of the personality as "superego," "ego," and "id." It was he who laid the groundwork not only for the interpretation of dreams but also for the understanding of every human action or word, including a slip of the tongue. However, while we have attributed Freud to have said the first words in psychoanalysis, much progress has been made in psychoanalysis since his days. Among the earlier workers in psychoanalytic technique, various modifications were suggested by Adler, Jung, Reich, Rank, Stekel, and many others. Later, by the leaders of the contemporary schools of psychoanalysis, the following outstanding contributions have been made.

Recently, particularly in the past twenty-five years, a great wealth of material in original research has been collected in the fields of anthropology and sociology, which was not available at the time Freud first developed his theory of psychoanalysis. These data shed a different light on the understanding of human behavior and mental disorder so that today we can no longer describe a patient or a person as an isolated entity aside from his cultural setting. We can only speak of him as a person from a certain culture or from a certain class, with a particular set of beliefs or value systems characteristic of that group. Thus a Japanese brought up in Japan would certainly have a different sense of values from a man born and brought up in Sweden, and would have to be handled differently in psychotherapy.

This was where Freud erred, and Karen Horney is one of the first psychoanalysts in this country who pointed out this difference. Horney maintains that the difference between a normal and a neurotic individual is a relative one. What is considered normal in one society may be considered neurotic in another society, and vice versa. She further maintains that neurosis is a product of the cultural condition of that particular society and of that particular age in which the individual is a part. This is a bold departure from the predominantly biological orientation which is so typical of Freud's work. To Freud, libido is energy with a definite amount and intensity which can be liberated, dammed up, or attached to certain parts of the body, or even be mingled with certain other elements resulting in a different phenomenon, etc., as if libido is a physical substance of a measurable quantity. This mechanistic-materialistic framework is a product of his time, when science, in the latter part of the nineteenth century, was in the mind of most people almost identical to physics. Similarly, what Freud described in his earlier works might have been typical of the highly moralistic, much repressed and yet sex-ridden middle class society in Vienna. And it would certainly be a grave mistake, in the light of present day knowledge of cross-cultural studies, to think that the underlying nature of the emotional conflicts as he then described, are just as applicable to a modern society as we may find today in New York or in Hawaii.

Another significant difference in point of view which Horney first adopted and which has since been recognized by many other psychoanalysts is that of a "functional approach" versus a purely "genetic approach" in dealing with emotional conflicts. Horney asserts that while it is important to trace the origin of a neurosis to its development in childhood, for example, to a certain traumatic event of a girl's seeing the nakedness of her father while she was at the age of five, it is quite impossible to help the patient in her present neurotic condition without knowing fully the immediate situation in which she lives and the whole gamut of subtle mechanisms she is using now to make the sustenance of the neurosis possible.

On the other hand, Erich Fromm is considered by Horney to be the first psychoanalyst in German literature to have "recognized the importance of cultural factors as a determining influence in psychological conditions."[1] The first of his two books published in this country, "Escape from Freedom," is a master-work of historic analysis of psychology during the period of the Middle Ages and of the contemporary era. In this book he brought out very clearly the interrelation of psychological, socio-economic, political, and ideological forces in shaping the history of mankind. He pointed out the one-sidedness of Freud's viewpoint in this regard: "The relation of the individual to society in Freud's theory is essentially a static one: the individual remains virtually the same and becomes changed only in so far as society exercises greater pressure on his natural drives or allows more satisfaction."[2] On the contrary, Fromm believes that the "society has not only a suppressing function, but it has also a creative function."[3] Culture molds the development of the individual. In turn, the individual also contributes to the advancement or decline of the society.

Furthermore, Fromm asserts that the essential question to be studied in each psychiatric problem is "the particular kind of relatedness of the individual toward the world, and not that of satisfaction or frustration of single instinctual desires."[4] This is a matter of great clinical importance. In many cases of sexual perversion, the crucial issue is then primarily the patient's personal attitude to the sexual partner, whether of the same or of the opposite sex, and what function that particular activity serves in the life of that individual, instead of merely looking upon the sexual activity as the primary "cause" of all the person's emotional difficulties. A sadist or a masochist is thus looked upon by Fromm as a person who, through living in mutual dependence with another, tries to avoid his unbearable feeling of "individual powerlessness and isolation."[5]

Another significant contribution of Fromm is in the matter of the interpretation of dreams. While Freud regarded all dreams as representing primarily wish-fulfillment, especially of a sexual nature, Fromm considers this a very narrow and rather negative approach. He thinks that while some dreams are undoubtedly expressions of repressed forbidden sexual thoughts or their elaborations, dreams may also be a medium through which one may depict his relatedness to his fellow human beings or may represent in a most picturesque way his idea of the kind of world in which he lives. Besides, as many people may "think" at night, dreams can also represent attempts to solve some problems during sleep, using all the symbols of the unconscious. Fromm also believes that dreams should be studied in view of the cultural background of the dreamer, while at the same time the dreams may give some valuable clues as to an understanding of that particular cultural background.[6]

The growing acceptance of psychoanalysis in the twentieth century coincides with the popular belief that all repression is harmful, and that complete removal of inhibition would almost invariably lead toward the road to mental health. Many psychiatrists and physicians even naively think that it is old-fashioned or unscientific to take any moral stand in dealing with the emotional problems of their patients. Fromm is very impatient with such an irresponsible attitude. He thinks anyone dealing with the personal lives of individuals cannot help but make value-judgments, consciously or unconsciously. He even goes so far as to make a positive stand that there is a definite relationship between ethics and psychoanalysis. "Neurosis itself is, in the last analysis, a symptom of moral failure. In many instances a neurotic symptom is the specific expression of moral conflict, and the success of the therapeutic effort depends on the understanding and solution of the person's moral problems."[7] This is a far cry from the "a-moral" attitude of many other workers in the name of Science in the past.

Readers of the writings of Henry Stack Sullivan, and even many of his personal students found him one of the most difficult writers to understand because of his highly technical terms, many of

[1] Horney, K.: The Neurotic Personality of Our Time, W. W. Norton & Co., Inc., New York, 1937, p. 20.

[2] Fromm, E.: Escape from Freedom, Farrar & Rinehart, Inc., New York, 1941, p. 11.

[3] Fromm,[2] p. 13.

[4] Fromm,[2] p. 290.

[5] Fromm,[2] pp. 140-179.

[6] Personal communication of Fromm to the writer.

[7] Fromm, E.: Man for Himself, Rinehart & Co., Inc., New York, 1947, p. viii.

which are entirely his own, such as "empathy," "consensually validated symbols," and "parataxic distortion." However, these ideas and concepts as represented by such seemingly odd terms, once fully grasped and understood, represent some very important advances in the theory of psychoanalysis, and in practice they are some of the most helpful guiding posts in therapy. He was the first who coined the words "interpersonal relations" as the substance for study in psychiatry. "The field of psychiatry is the field of interpersonal relations."[8] Although today people frequently use the word "interpersonal" vaguely in psychiatric literature as meaning different things at different times, to Sullivan it has a very specific meaning. First of all, it is an advance from the older concepts of human nature in the days of behaviorism or of individual psychology, when people are studied either in their isolated "elements" of sensation, perception, memory, emotion, etc., or when individuals are seen as isolated entities apart from their social settings or from their cultural contexts. To Sullivan every human event is viewed as persons in action, interaction, and reaction. It is elucidated most vividly by the example of the dog-fight he often borrowed[9] from Mead in the latter's "Social Psychology," in which two dogs are involved in an intense struggle. Dog A leaps at dog B, and in turn dog B also leaps at dog A, and then again dog A leaps at dog B. In the second instance, dog B's leaping is not only a response to the leap from dog A, but also acts as a stimulus to dog A's further leaping. Therefore it will be utterly erroneous to regard the leaping of each dog as an isolated phenomenon, and it would be just as much of a mistake to regard the action of any human being as an isolated phenomenon.

Sullivan, like Fromm, believed that a great deal of Freud's observations were amazingly correct, but that many of Freud's interpretations were wrong. Realizing the importance of certain portions of the body in personality functions, he preferred to use the terms "oral, anal, and genital *zones of interaction*,"[10] instead of calling them "oral, anal, and genital *erogenous zones*" according to Freud. Here it is not only a difference of emphasis. In the case of Sullivan, it is a matter of interaction between an individual and his environment or in the case of Freud, a matter of sexual stimulation or distribution of the libido. It also brings out the cultural differences in the function of the mouth or in the meaning of sexuality that vary from person to person and from society to society. This is one example of how those terms used by Sullivan are not just new names, but new concepts of great importance.

Another such typical term used by Sullivan is "parataxic distortion." To put it very simply, Sullivan meant that most of us had only a very distorted picture of ourselves and of the other person or persons, often on account of our previous experiences with "significant adults" in our childhood, such as father, mother, or even a governess. One of the main tasks in psychoanalysis is therefore to free people of such distortions. Again to use the crude example of the dog-fight: dog A fights with dog B, not knowing that it has only a vague notion of what dog B really is like, because his reaction to dog B is entirely based upon his previous dealings with dogs C, D, E, ad. inf. At the same time dog A has also a distorted picture of itself, something like a childhood playmate dog F. Therefore in actuality, it is the false notion of dog A (something like dog F), fighting with a mixed notion of dogs B, C, D, and E. In actual human relationship, it is much more complicated than this. Therefore Sullivan soon utilized this concept in his criterion for "a psychiatric cure" which to him meant "an expanding of the self to such final effect that the patient as known to himself is much the same person as the patient behaving with others."[11]

Unfortunately Sullivan was one of these great men who have worked hard and spoken much but written little. Most of his writings are in the form of articles in scientific literature or as a series of lectures which he delivered to a small circle of his own following. Many of his ideas were continuously in the process of shaping and re-shaping. Thus his sudden death in Paris early this year was a great loss to the development of psychoanalysis, which, in the words of Erich Fromm, was "irreplaceable."

The foregoing review leads one to the matter of practical application and to bring one up to date on the technique of therapy. Partly as a result of the changes in theoretical premises as mentioned above, many changes have taken place in actual practice, which may be summarily stated as follows:

More flexibility is allowed in the frequency of interviews and in the total length of treatment. It is no longer believed absolutely necessary for each patient to be seen five or six times a week, sixty minutes each session, for at least two or three years as advocated by earlier analysts. Three sessions a

[8] Sullivan, H. S.: Socio-Psychiatric Research: Its Implications for the Schizophrenia Problem and for Mental Hygiene, Am. J. Psychiatry 10:977 (May) 1931.

[9] From conversations between Sullivan and the writer in 1948.

[10] Sullivan, Harry Stack: Conceptions of Modern Psychiatry, William Alanson White Psychiatric Foundation, Washington, D. C., 1947, pp. 31-33.

[11] Sullivan,[10] p. 117.

week of forty-five minutes each are often the accepted frequency to begin with, and the total duration of analysis is also a matter of each individual case. Many feel that the liability of too much dependency on the therapist will thus be minimized. Instead of the reclining position on the traditional analytic couch, the sitting position has often become the position of choice, allowing the patient to speak face to face with the analyst. Since the latter is a participant observer, he is thus unavoidably called upon also to take a more active part in the therapeutic relationship, in contrast to that advocated in the past, of the therapist's hiding his individual identity behind an artificial screen of passivity. He is now expected to take an active lead in the selection of material to be "talked about" in the interview instead of letting the patient wander off into the so-called "free association." It is also often considered desirable for the therapist to manipulate the "transference situation."

Last but not least, in terms of dollars and cents, the more progressive analysts today are also more liberal in the matter of asking a certain fixed fee from patients undergoing analysis. Today few still share Freud's earlier belief that cure in psychoanalysis can only be effected if the patients are to undergo certain "pain" in the process of being analyzed, such as that of making a costly payment. The more balanced view nowadays is to emphasize that the patient must bear his share in financing the treatment proportionally in terms of his financial ability. More and more low-cost psychoanalytic treatment centers have been established in large cities in the United States where patients may pay anywhere from a few dollars to a few cents per session with as favorable therapeutic results as those patients treated by paying a high fee.

The nature of this article and the limitation in space do not allow a full narration of all the new developments in psychoanalytic theory and techniques in recent years. It is hoped that the above account will serve to elucidate some of the more outstanding events in the unending search and research for the betterment of knowledge and the ever increasing efficacy of methods in the treatment of one of the commonest and most distressing ailments of mankind. The changing concepts and the modification in techniques as originally developed by Freud and others should by no means imply that these earlier contributions are to be completely discarded nor the importance of the groundwork laid by them minimized. Needless to say, a good analyst would analyze the different points of view, making his final judgment as to how he would best conduct his psychoanalysis.

Territorial Hospital

Bacteroides Bacterial Endocarditis

Cure by Massive Doses of Penicillin

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HONOLULU

INFECTION with an organism which was highly resistant to both streptomycin and penicillin was successfully treated by massive doses of penicillin.[1]

Despite exhaustive efforts, the organism could not be satisfactorily cultured or completely classified.

Case Report

The patient was a 22-year-old Hawaiian woman who entered the hospital August 6, 1948 because of malaise, fever and right costo-vertebral angle tenderness. She had previously entered six years before for a subtotal thyroidectomy for Graves' disease. A year later she had recurrent symptoms of hyperthyroidism during the second trimester of her pregnancy, and a 30 gram resection was done. She went on to deliver a full-term normal infant. Physical examinations during these entries revealed the presence of a harsh, fairly loud grade III systolic murmur with transmission to the left axilla and lower left hemithorax. She had no history of joint pains or other illness suggestive of rheumatic fever, her only illness besides Graves' disease being pneumonia at age 11.

Physical examination revealed a moderately ill woman with a temperature of 102° F., a pulse of 96, blood pressure 100/50 (right), 100/65 (left) (sitting), and a respiratory rate of 20. She had a moderate exophthalmos. No eyeground changes were present. The pharynx showed some prominence of the lymphoid tissue. A low, well healed transverse cervical scar was present. No deformity of the chest was noted. The cardiac apex lay in the fifth interspace just lateral to the mid-clavicular line. No thrill was palpable. The first mitral valve sound was accentuated. A few observers thought they heard a faint diastolic murmur. There was a grade III systolic murmur which was transmitted to the axilla and base of the left hemithorax. Lungs were clear. The liver edge was non-tender, fairly sharp and was felt just below the costal margin at mid-clavicular line when the patient inspired deeply. The kidneys and spleen were not palpable. There was slight tenderness in the right costo-vertebral angle. No abnormality of the extremities was noted.

Urinalysis revealed: ph 6.0, specific gravity 1.014, albumin 1 plus, sugar 0, 4-6 white blood cells, a few red blood cells per high dry field, a few coarse granular casts per low power field, and a few squamous epithelial cells on a non-catheterized specimen. Wintrobe sedimentation rate: uncorrected 59; packed cell volume 32, corrected sedimentation rate 38. A blood count showed 4,100,000 red blood cells per cubic mm., 11,000 white blood cells per cubic mm. with 69% polymorphonuclears, 27% lymphocytes, and a few polychromatophilic red blood cells were present in the smear. STS (Laughlen reaction) was negative. A second catheterized urinalysis showed no albumin or red blood cells, although an occasional granular cast was present.

Blood cultures of August 26 and 27 were negative at forty-eight hours but revealed a gram negative bacterium at ninety-six hours.

At entry the diagnosis was considered to be rheumatic fever and the patient was put on 0.6 grams acetylsalicylic acid five times a day. The temperature gradually subsided over a two-week period. At one time a 2 mm. splinter hemorrhage was noted under her right little fingernail, and the patient told of briefly seeing some red spots at the fingertips. When the two blood cultures were reported negative at forty-eight hours, the patient was discharged home, afebrile, to be followed in the outpatient department. Two days later blood cultures in Brewer's thioglycollate medium were reported positive.

An X-ray of the chest showed a moderate enlargement of the cardiac width, being shown to be predominantly left ventricular on fluoroscopy. Fluoroscopy showed evidence of left auricular enlargement. The electrocardiograph was interpreted as being normal. A diagnosis of rheumatic myocarditis with mitral stenosis and insufficiency was made at this point.

She re-entered, at our request, September 11, twelve days after her discharge. She was asymptomatic at the time, and her temperature was 98.6° F. on entry. No change had occurred in her previous physical findings. Pelvic examination was normal. Three blood cultures were taken and reported back in four to five days each showing a gram negative bacterium, which was subsequently found to be sensitive to 10 units of penicillin per cc. and 100 units of streptomycin per cc. A blood count at entry showed 6,900 white blood cells per cubic mm. with 60% polymorphonuclears, 37% lymphocytes and 3% eosinophiles; 3,740,000 red blood cells per cubic mm. and a hemoglobin of 9.3 grams per 100 cc. of blood.

On September 18, 1948, the patient was started on 600,000 units of penicillin plus 2 gm. of caronamide every three hours intramuscularly. On the third day of treatment she complained of a cramping pain in the right upper quadrant that was evanescent, being relieved by the passage of flatus. No abdominal tenderness was noted on examination. Her temperature rose to 101° F. at this time. This pain recurred more severely the next day, being present in both the right upper quadrant and the right flank. On examination the patient revealed no rigidity or spasm, although direct and rebound tenderness were present. Rectal examination revealed diffuse pelvic tenderness. A urinalysis failed to reveal any evidence of crystalluria or hematuria, although a 2-plus albuminuria was present. A white cell count was 14,900 with 81% polymorphonuclears, 4% stabs, 1 myelocyte.

Received for publication October 5, 1949.

[1] Clark, Wm. H., Bryner, S., and Rentz, L. A.: Penicillin-resistant Non-hemolytic Streptococcal Subacute Bacterial Endocarditis, Am. J. Med. 4:671 (May) 1948.

Surgical consultation was called. Opinions were divided between perinephric abscess and renal infarction on an embolic basis. The next day pain had disappeared from the right side and had appeared similarly on the left. At this point caronamide was discontinued because of the patient's nausea; penicillin was increased to 2.5 million units intramuscularly every three hours (20,000,000 units daily).

Blood levels of penicillin two and one-half to three hours after the preceding dose were twelve to fifteen units per cc. on two occasions. It was felt an adequate level was being maintained.

By September 30, 1948, twelve days after her penicillin treatment was started, the patient was afebrile and remained so for the following three weeks of therapy. The last positive blood or urine culture for the organism was obtained September 24.

On October 11 her spleen became palpable for the first time. It was decided to continue penicillin an additional ten days on this account. The large doses of penicillin resulted in blistering and anesthesia of the patient's buttocks. She was discharged November 1, 1948, asymptomatic despite the presence of a rapid sedimentation rate which was believed to be the result of the inflammation of her buttocks.

Three weeks after discharge she returned for a week's stay because of a draining abscess of the buttocks. No organisms were recovered on culture and the patient recovered completely in seven days on symptomatic therapy.

On April 19, six months after her previous admission, the patient re-entered, three and one-half months pregnant, for a uterine curettage and sterilization because of severe cardiac damage. She was given prophylactic penicillin (300,000 units twice daily) pre- and postoperatively. Four negative blood cultures were obtained during her stay of eight days. The urine showed no red blood cells or albumin at this time. Her red blood count was 4,200,000, hemoglobin 11.3 grams and white blood count 5,300. When last seen, the patient was well, afebrile, and showed no evidence of congestive failure. Her electrocardiogram showed right axis deviation for the first time at the time, but was otherwise within normal limits.

Discussion

This case is one of subacute bacterial endocarditis caused by a highly resistant gram negative bacterium presumably of the genus Bacteroides. The genus Bacteroides[2] is composed of a group of gram negative, anaerobic, non-sporulating, rod-shaped bacteria. Morphologically and physiologically (including pathogenesis) the group appears to be somewhat heterogeneous. Some species are motile, others non-motile; some appear to be quite highly pleomorphic while others show more or less constant colony and cellular characteristics; some grow (under reduced oxygen tension) on ordinary laboratory media, others being extremely fastidious, requiring blood or tissue or other complex organic material in the medium. Physiological reactions are said to be equally diverse among the species; a few of the twenty-three species described are known to be pathogenic for man, producing such a variety of infections as appendicitis, pulmonary gangrene, abscesses of the urinary tract, mastoiditis, puerperal infections, liver abscesses and septicemias in varying degrees. Many species, whether pathogenic or not, have been isolated from the human intestinal tract. The group has not been studied critically.

The organism considered to be the etiologic agent in the present case was grown several times in blood culture medium. It was definitely a rod-shaped bacillus, not showing the cocco-bacillary form often associated with the genus Hemophilus. The average cell was about 1.5 to 2.0 microns long and rather thick. The ends were rounded, and the cells were seen singly more often than in chains or pairs. Growth in the original blood culture medium was not profuse, but no difficulty was experienced in observing the bacteria on stained preparations. In two cultures Staphylococcus albus was also found, but was considered to be a skin contaminant since it was not consistently found with the other.

Attempts to isolate this gram negative organism in pure culture all failed regardless of the type of medium used. The organism was extremely fastidious as to growth requirements, and apparently needed completely anaerobic conditions for growth. At that time, this laboratory was not equipped for anaerobic culture work, and it was impossible to determine any of the physiological reactions. On a morphological basis, and judging from the apparently complex nutrient requirements (and anaerobiosis) the organism has been tentatively placed in the genus Bacteroides. It is well known that many bacteria normally harmless commensals of the intestinal tract can become moderately to highly pathogenic upon gaining admission to the blood stream. After that localization in the heart might logically follow with resulting subacute bacterial endocarditis.

The organism showed an unusual reversal of the penicillin-streptomycin sensitivity ratio that is usually seen in gram negative organisms (sensitive to 10 units penicillin per cc. and to 100 units streptomycin per cc.).

In order to obtain an adequate level, it was necessary to administer 20,000,000 units of penicillin intramuscularly daily. This was accomplished by 2,500,000 units of penicillin every three hours after a preliminary trial with 600,000 units of penicillin, plus the suboptimal dose of sixteen grams of caronamide, which resulted in

[2] Breed, R. S., Murray, E. G. D. and Hitchens, A. P.: Bergey's Manual of Determinative Bacteriology, ed. 6, Baltimore, Williams and Wilkins, 1948, pp. 564-575.

patient's becoming nauseated. She requested us not to resume the caronamide. In the light of the more recent work on penicillin and the lag phase of the bacterial growth, the same result may have been obtainable with less frequent injections, but even larger doses of penicillin. The patient received a total of 622,000,000 units of penicillin over a thirty-three day period with her blood level never dropping below twelve to fifteen units penicillin per cc.

During her course she had a renal infarction and another renal or splenic infarction. Urinalysis seven and one-half months later revealed no evidence of permanent diffuse glomerular damage.

She has shown no evidence of congestive failure and appeared in good health, but, in view of her presumably moderately severely damaged heart, it was decided she should not complete her last pregnancy and should achieve no future ones. Having two healthy children already, the patient readily agreed.

In conclusion, let us emphasize again the importance of a high index of suspicion in cases with obscure malaise and fever, and the importance of repeated blood cultures, both aerobic and anaerobic.

Summary

A case of subacute bacterial endocarditis due to a gram negative bacterium highly resistant to streptomycin and moderately so to penicillin, apparently cured by massive doses of penicillin, is presented.

1133 Punchbowl Street.
Dillingham Building.
Queen's Hospital.

Glomus Tumor Occurring on the Trunk

HENRY C. GOTSHALK, M.D. AND
RICHARD C. DURANT, M.D.
HONOLULU

THE GLOMUS body is a specialized vascular organ found just beneath the subpapillary vessels of the dermis. According to Popoff[1] it consists of: (1) an afferent artery; (2) an arteriovenous anastomosis proper; (3) preglomic arterioles nourishing all constituents of the glomus; (4) an expansion zone furnished with a neuroreticular mechanism which controls the function of the arteriovenous shunt; (5) a specialized system of collecting veins, and (6) an outer lamellated collagenous zone surrounding the entire glomus. He also suggests that the function of the glomus is to control arteriovenous circulation, and to regulate both local and general body temperature. The distribution of these units is principally in the extremities, particularly the fingers and toes, although they may occur anywhere in the dermis.

Wood in 1812 described a "painful subcutaneous tubercle" as a clinical entity. In 1924 Masson's[2] pathologic studies first established that the "painful subcutaneous tubercle" was a benign tumor of the subcutaneous glomus body. He later distinguished four types of tumors according to histologic structure: (1) the predominantly angiomatous; (2) those with fewer vessels and largely musculoendothelial stroma (the perivascular type); (3) those made up largely of nerve fibres (the neuromatic type) and (4) degenerative forms showing simple edema, hyaline, and mucoid change.

Clinically the glomus tumor is a well circumscribed growth that is freely movable in the skin. These tumors are small, ranging from 2-4 mm. in diameter. They are pink, red or blue, depending on whether the arterial or venous elements predominate. From their point of origin these tumors may grow upward toward the surface, or inward to the subcutaneous fat. They may be present a considerable length of time before producing symptoms. When clinically apparent they cause lancinating pain, often precipitated by the slightest stimulus, such as brushing of clothes over the affected skin surface or slight change of temperature. The pain is excruciating in character and often radiates up a major nerve trunk.

The most common site of location is beneath the finger nails. Such tumors not infrequently produce roentgen evidence of pressure necrosis in the bone of the terminal phalanx.

Mason and Weil[3] in 1934 reviewed 34 cases of glomus tumor. In this series, 21 were located in upper extremities, 1 over the acromion and 11 in the lower extremities. In one instance the location was not given. Beaton and Davis[4] analyzed 271 recorded cases and of this group only 1 occurred on the trunk. The remainder were found on the extremities. Mathis and Schulz[5] recorded 18 cases found in 580,000 patients admitted to Massachusetts General Hospital. Of this group 15 were found about the distal phalanx, 2 about the knee and 1 on the foot. The great majority of glomus tumors occur in the limbs, especially the upper extremities; elsewhere they are extremely rare.

The purpose of this paper is to report a case in which the location of the tumor is unusual.

Case Report

A. N. C. a Caucasian man, age 81, was seen on July 18, 1949, complaining of severe pain under the left shoulder blade. The pain was paroxysmal in type and was aggravated by rubbing of clothes, but relieved to some degree by heat. The pain was described as the "worst he ever had" and seemed to radiate up the intercostal space to the spine. A bluish nodule in the vicinity of the pain had been noted about six months before the pain began.

Past history was irrelevant, except that patient had a transurethral prostatectomy three years ago with excellent results. He also had suffered off and on for the past thirty years from hypertrophic arthritis affecting principally his fingers and spine.

Physical examination showed a well developed elderly white male. Eyes showed arcus senilis; pupils reacted to light and in accommodation. Patient wore upper and lower dental plates. The chest was emphysematous, with a few coarse rales at the bases, which disappeared after deep breathing. On the left posterior chest wall below the angle of scapula in sixth intercostal space was a small elliptical, slightly elevated, bluish black lesion, 3.5 mm. in diameter, which seemed deeply imbedded in the skin. The growth was freely movable and showed incomplete blanching on direct pressure. It was only

[1] Popoff, N. W.: The Digital Vascular System, Arch Path. 18:295 (Sept.) 1934.

[2] Masson, P.: Le Glomus Neuromyo-Artériel Des Régions Tactiles et ses Tumeurs, Lyon Cir. 21:257, 1924.

[3] Mason, M. L., and Weil, A.: Tumors of the Subcutaneous Glomus, Surg. Gyn. and Obs. (May) 58:807, 1934.

[4] Beaton, L. E. and Davis, L.: Glomus Tumor, Quart. Bull. Northwestern Med. Sch. 15:245, 1941.

[5] Mathis, W. and Schulz, M.: Roentgen Diag. of Glomus Tumor, Radiology 51:71 (July) 1948.

tender when touched by the sharp point of a needle, but this did not produce the lancinating pain that was initiated by riding in a car with the clothes brushing over the lesion. The heart was normal in size, and the blood pressure was 130/90. Abdomen examination was normal.

Laboratory findings: The hemoglobin was 13.35 gms., and the differential count was normal. Urine was normal except for an occasional pus clump per high power field. The Wasserman and Kahn tests were negative. Antero-posterior and lateral roentgenograms of the spine showed very extensive hypertrophic arthritis, involving most of the vertebral bodies. Many of vertebral bodies were bridged.

It was suggested to the patient that this severe pain might be caused by the elliptical, bluish black tumor on his back, and that this growth was probably a glomus tumor, in an unusual location. It was also suggested that the removal of this growth would shortly cause cessation of pain.

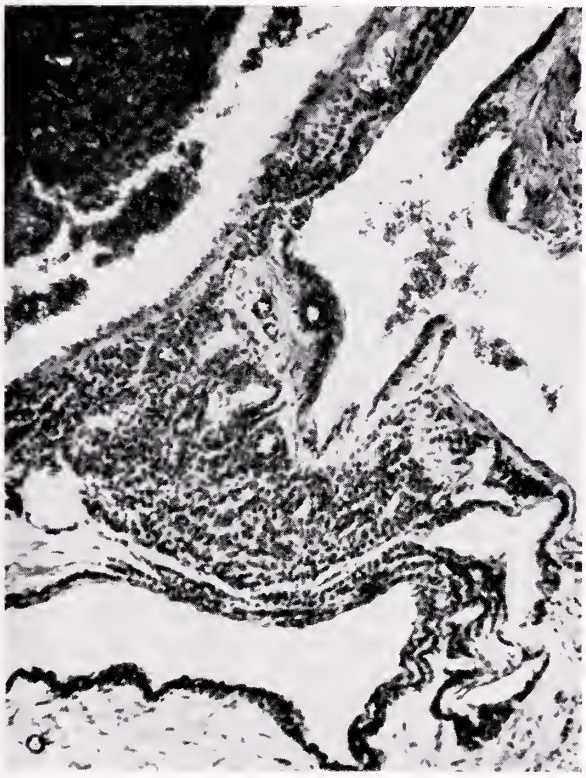


FIG. 1.—(X 120) shows the angiomatous nature of the tumor. The large blood space, two smaller endothelial-lined spaces between which are glomus cells.

After a few days on the usual analgesics, with no relief, the patient consented to removal of the lesion. This was done on August 21, 1949, by one of us (R. C. D.), and a pressure dressing applied. When the wound was redressed 3 days later the pain had almost completely disappeared.

One week after removal, all symptoms had subsided. Microscopic examination of the specimen removed (see figure 1) showed an angiomatous type of growth in which the blood sinuses are lined with endothelium and surrounded by layers of epithelioid or glomus cells.

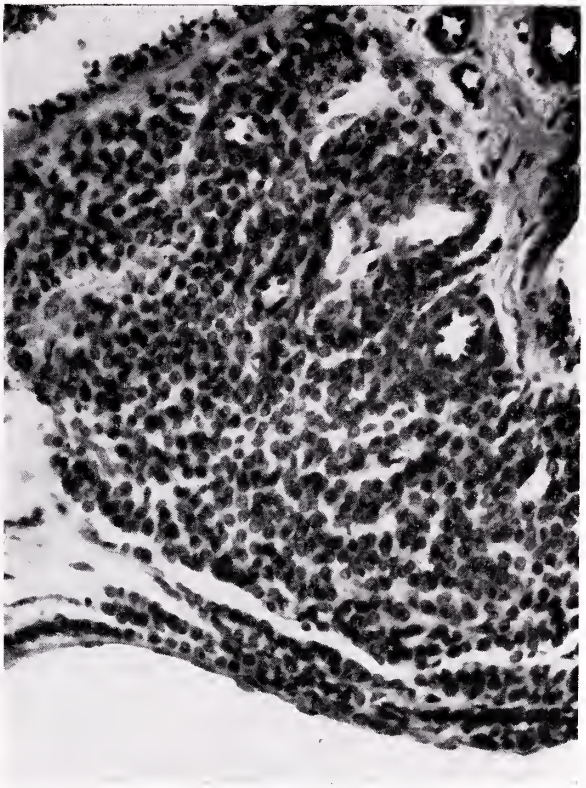


FIG. 2.—(X 265) shows group of glomus cells, some lined up along vascular spaces.

Discussion

Theoretically, tumors of the subcutaneous glomus can appear anywhere, and in any age group. The oldest patient reported was an 85-year-old man;[3] the youngest, age 6. In our case the tumor was predominantly a venous angioma in structure, and its origin in the sixth intercostal space at angle of the scapula is a most unusual position.

Summary

A case of subcutaneous glomus tumor is reported in a most unusual location, and in an 81-year-old man.

(We wish to express our appreciation to Dr. Irvin L. Tilden for preparing the photomicrographs.)

Young Hotel Building

Carcinoma of the Vulva

H. McLEOD PATTERSON, M.D.
HONOLULU

PARSONS[1] has stated that carcinoma of the vulva remains perhaps the most badly diagnosed and poorly treated condition in the entire field of malignant disease.

The case of carcinoma of the vulva to be presented here departs in some respects from the average case, especially in its exact location on the vulva and in that the treatment carried out, though apparently adequate in this case, was less radical than is advocated by nearly all writers on the subject and certainly was less radical than I would follow today with a similar case. McKelvey[2] and the discussants of his paper have made a plea for accurate reporting of all cases of carcinoma of the vulva and all methods of treatment so that a rational approach to this relatively rare problem may be arrived at. An attempt will be made to present briefly the consensus of the literature as to the history, findings and recommended treatment in the average case of carcinoma of the vulva.

The Vulva

The general term, vulva, refers to the external genitals in women and includes the mons veneris, the labia majora, the labia minora, the clitoris with its glans and the vestibule with the orifices of the urethra and vagina and the orifices of the outer glands of the urethra and vagina. This rather elementary, reviewing statement is made because I had almost forgotten that the mons veneris was a part of the vulva until the case being presented was first seen. The lesion extended from the middle of the mons veneris, was entirely separate from the clitoris and labia and it had to be decided whether the tumor was of the skin of the abdominal wall or of the vulva. According to the available literature, this location for carcinoma of the vulva is rarely reported.

The Lymphatics

The lymphatic drainage of the vulva may be roughly divided into three sections, (a) that from the anterior third of the vulva which passes outward and upward to the superficial inguinal glands, (b) that from the posterior two-thirds of the vulva which runs generally to the same glands, but a very important point is that these lymphatics often pass to the superficial inguinal glands of the opposite side, and (c) that of the dorsal surface of the clitoris which passes to the deep inguinal glands.[3]

Incidence, Classification and Histology

Carcinoma of the vulva is relatively rare, constituting from 2 to 4 per cent of all genital cancer in women.[4] Though adenocarcinoma may occur, carcinoma originating from the epidermis is much more common, comprising from 60 to 70 per cent of all malignancies of the vulva. These squamous cell (epidermoid) or basal cell carcinomas arise most often from the labia minora, the inner surfaces of the labia majora, or the folds about the clitoris. The most highly malignant tumors of the vulva, presenting loose-structured, undifferentiated cells resembling sarcoma, may be found in lesions of the clitoris or from old syphilitic, vestibular ulcers, and are fortunately rare.[5] Those of intermediate malignancy arise from Bartholin's glands. The majority of lesions of the vulva are well-differentiated, papillary nodules and careful searching is required to prove their malignancy. The rapidity of growth and extension correspond fairly closely to the histological malignancy. In Taussig's 155 cases, 57 per cent showed metastasis either seen in advanced, inoperable cases or found microscopically in removed tissues. Some metastases were probably overlooked and Taussig[5] feels that two-thirds of all cases show metastases. In those operated upon 48 per cent showed metastases to the regional glands with distant metastases being infrequent.

Pathogenesis and Prevention

Lunin[6] found 3 of 50 cases of carcinoma of the vulva reported from Charity Hospital in New Orleans to have primary carcinoma of other organs, and Taussig[5] found 10 of his 155 patients to have primary carcinoma of other organs. Taus-

Read before the Hawaii Chapter, American College of Surgeons, September 16, 1949.

[1] Parsons, L.: Carcinoma of the Vulva, in Meigs, J. V., and Sturgis, S. H., editors, Progress in Gynecology, Grune and Stratton, New York, 1946, p. 395.

[2] McKelvey, J. L.: Treatment of Carcinoma of Vulva, Am. J. Obst. & Gynec. 54:626 (Oct.) 1947.

[3] Hunt, E.: Diseases Affecting the Vulva, C. V. Mosby & Co., St. Louis, 1946, p. 22.

[4] Morton, D. G.: Malignancy of Female Genitalia; Review of Literature for 1936, Internat. Abstr. Surg. 65:177; 281; in Surg. Gynec. & Obst. (Sept. & Oct.) 1937.

[5] Taussig, F. J.: Cancer of Vulva; Analysis of 155 Cases (1911-1940), Am. J. Obst. & Gynec. 40:764 (Nov.) 1940.

[6] Lunin, A. B.: Carcinoma of the Vulva, Am. J. Obst. & Gynec., 57:742 (April) 1949.

sig further reports that in a recent large series of cases of skin cancer it was found that carcinoma of other organs occurred twice as often as in individuals without skin cancer and he feels that this points to a somatic factor in the causation of cancer.

At present there seems to be less disagreement than in the recent past as to the differentiation between kraurosis and leukoplakia of the vulva, but even if one considers each as being a clinical entity there seems to be sufficient evidence to warrant always a thorough examination of the patient with either or both of these conditions to make certain that carcinoma has not developed either in the leukoplakic or kraurotic areas or concurrently.[7] It certainly seems proper that all patients with either or both of these conditions be adequately treated (and this may mean radical vulvectomy) and be followed closely for many years if all carcinoma of the vulva is to be found early enough for adequate treatment to be instituted. Lunin[6] found a higher percentage than is usually reported below the age of 50, namely in 21 of 50 patients, but of these 21, 20 were negro and of the 20, 12 had one or more of the granulomatous venereal diseases. Paget's disease of the vulva and irritative lesions about the vestibule and Bartholin's glands should be promptly and adequately treated and thoroughly followed. Taussig[5] found 72 of 104 epidermal cancers were preceded by such pathological conditions as mentioned above and the literature is overwhelmingly in agreement that many cases of carcinoma of the vulva can be prevented if these conditions are adequately treated early.

Symptomatology and Incidence

Itching is the most common symptom, followed by the reporting of a new growth or a lump or a nodule or an unhealed ulcer. Later a foul or bloody discharge may be present. Pain is a symptom if there is an ulceration of the vulva. The recognition of the early signs and symptoms of one of the predisposing conditions represents the key to successful early management.

The average age is from 58 to 60, with 88 of Taussig's 155 cases being over 60. Nearly all cases are post-menopausal and not related to child-bearing. The delay period, from first symptom until adequate treatment is attempted, averages about one year, with much of the blame for the delay resting with the patient, who usually has applied various salves and similar measures; but all too many cases have been wrongly diagnosed and inadequately treated by physicians. Taussig[5] believes that 70 per cent of all cases of carcinoma of the vulva are operable. Most of the surgical mortality is in the older patients and many of these older patients soon die of unrelated degenerative conditions even though they are apparently cured of carcinoma of the vulva by surgery.

Treatment

Cosbie[8] has stated, "Carcinoma of the vulva is a slowly growing, radio-resistant tumor developing in tissues which have ill-defined limits and free lymphatic drainage." Roentgen and radium irradiation have been extensively used with disappointing results, leaving surgery as the recommended approach. Common sense must determine how radical the surgery should be. A long, extensive and possibly crippling operation in a very old, poor-risk patient with metastasis is not wise. It must be determined how much can be accomplished and how much the patient can safely stand. At times, this means no surgery; again, it may mean local excision only, and in such cases irradiation has a place. In general, in the fair-risk patient below 65 years of age, a complete vulvectomy with dissection of the superficial and deep inguinal glands and femoral glands is the best procedure. Probably the vulvectomy should be done in one stage followed in a few weeks by the gland dissection, though Taussig[5] and others frequently do the entire procedure in one stage, using two surgical teams. The Taussig modification of the Basset[9] operation is the most popular procedure today, though the modification advocated by Nathanson[10] is an excellent approach to the problem. The safest general anesthetic fitted to the needs of the patient should be used.

Case Report

Mrs. A. N., 27840, was admitted to the Hilo Hospital March 28, 1941, with the history of a tumor of the mons veneris present for fifteen months and gradually increasing in size. This had received a variety of self-prescribed medications, principally salves and Hawaiian herbs and concoctions. She was of Hawaiian-Caucasian extraction, 59 years of age, and said that aside from the present illness she had never been sick a day in her life. The tumor began as a nodule, slowly increasing in size, and for six months had been ulcerated, draining foul, brownish material constantly. For one month it had been bleeding from the surface, for which reason she

[7] Miller, N. F., Parrot, M. H., Stryker, J., Riley, G. M., & Curtis, A. C.: Leucoplakia of Vulva; Preliminary Report, Am. J. Obst. & Gynec. 54:543 (Oct.) 1947. Taussig.[5]

[8] Cosbie, W. G.: Cancer of the Vulva, Canad. M.A.J. 60:64 (Jan.) 1947.

[9] Taussig, F. J.: Benign and Malignant Tumors of the Vulva, in Curtis, A. H., Obstetrics and Gynecology, vol. 3, W. B. Saunders Co., Philadelphia, 1934, p. 586.

[10] Nathanson, I. T: Extraperitoneal Iliac Lymphodenectomy in the Treatment of Cancer of the Cervix, in Meigs, J. V., and Sturgis, S. H., editors, Progress in Gynecology, Grune and Stratton, New York, 1946, p. 388.

finally sought medical advice. It had never been painful. Wasserman was negative, roentgenograms of the lungs were normal and no abnormal physical findings were present except for the tumor of the mons veneris (see figure 1).

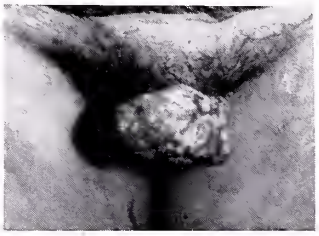


FIG. 1—Picture of patient taken 3 days before operation.

It was pedunculated, having a firm, unbroken base attached to the middle of the mons veneris and an ulcerated, secondarily infected, oozing, cauliflower-like surface three times the circumference of the base. When the mass was lifted up there was found to be an area of pubic hair and skin between the pedicle and the clitoris which appeared normal in every way. The labia minora, the clitoris and the remainder of the vulva were entirely normal. There were no palpable lymph glands in the inguinal areas or elsewhere.

Under ether anesthesia an incision was made on the left side above and paralleling Poupart's ligament. The flaps were undermined and all fat and glandular tissue removed, en masse, starting at the upper end of the incision. The inguinal canal was opened and all tissue around the round ligament was stripped off; the tissues about the great saphenous vein were dissected out. No enlarged glands were encountered. The right side was then incised and a similar dissection carried out. Then a vertical, elliptical incision was made beginning halfway to the umbilicus and extending downward on each side, wide of the mons veneris and crossing each of the transverse incisions previously made and continuing downward onto the labia majora on each side. The upper parts of the labia majora were excised by a W-shaped incision removing all tissues except the urethra. The tumor mass and the dissected tissues, including clitoris, upper halves of the labia majora and the fat and glands were then removed in one mass. The wound edges were then closed.

The pathologist's report, confirmed by a second pathologist, was epidermoid (squamous cell) carcinoma, grade IV, with no metastasis to any of the removed glands. Recovery was uneventful, the patient being transferred to the Olaa Hospital on the fifth post-operative day, and on the thirtieth day she went home with a small pubic area of granulation tissue remaining. One month later this was entirely healed. On the fifteenth day a course of deep roentgen irradiation was started over the pubic and inguinal areas, being repeated at three-day intervals until 2500 roentgen units had been given.

The patient has been seen at frequent intervals since. She has done all of her housework since discharge from the hospital. Figure 2 shows appearance in February, 1948, six years and ten months after surgery, illustrating the freedom from recurrence at that time. She was examined by me in August, 1948 and in September, 1949 and was entirely free of metastasis or recurrence at those times, the last time being eight and one-half years after surgery.

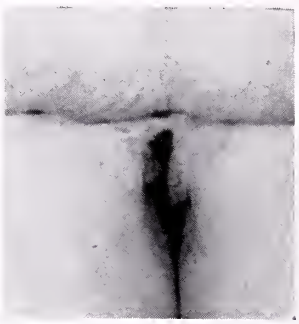


FIG. 2—Picture of patient taken in February, 1948 or 6 years and 10 months after operation.

Summary

A case of Grade IV squamous cell carcinoma of the vulva, occurring in a 59-year-old woman, and present for fifteen months before treatment, is presented. It is unusual in that it developed from the middle area of the mons veneris. It was treated by one-stage, partial vulvectomy and superficial inguinal and femoral gland dissection, followed by roentgen irradiation with apparent cure eight and one half years later.

The literature on carcinoma of the vulva is briefly reviewed.

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[EDITORIALS]

AFTER SAN FRANCISCO . . . HAWAII!

The luxury of a vacation in the mid-Pacific Paradise of Hawaii will be closer than ever before to hundreds of doctors and their families when they convene in San Francisco June, 1950.

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---

* Because of the advantage of providing prospective visitors with the name of a local doctor with whom they may correspond, Dr. Holmes' name has been arbitrarily chosen because he is the Governor's appointee to the Visitors Bureau.

ON PREPARING DEATH CERTIFICATES

Statistics dealing with causes of death as taken from death certificates have often been criticized as not representing the medical opinion of attending physicians. For years, when two or more diseases or causes of death were named, a "Manual of Joint Causes" was consulted which more or less arbitrarily assigned the cause which was to be given preference. Hence, leprosy was given preference over tuberculosis as a cause of death when both were mentioned, notwithstanding the fact that leprosy per se does not often cause death. A death due to tetanus caused by a minor cut or laceration was assigned to tetanus, but if a puncture wound was the cause, death was listed as "accidental." In a like manner, tetanus following a dog-bite was assigned to "Injury by Animals" and not to tetanus. A death certificate stating the cause of death as "Rat-bite Fever" alone would have been assigned to that cause; but if the physician added "caused by bite of rat," the cause of death would be placed under "Injury by Animals," which had preference as a cause of death.

The new procedure, in use in the Territory since January, 1949, is an attempt to base the cause of death on the attending physician's judgment of the relative importance of several disease conditions that might coexist, rather than to rely too heavily on fixed rules that assigned various weights to different diseases.

The Medical Certification is divided into two sections, as follows:

I. Direct couse (a).....
Antecedent (Due to (b).....
causes (Due to (c).....

II. Other significant conditions.....

Part I is used to report the disease, or causal sequence of disease conditions, which directly led to death. When a related sequence of morbid conditions is involved, the disease or condition *last* occurring is to be entered in (a), with precursory conditions following in (b) and (c). Thus, the last condition stated in Part I will be the underlying cause of death which started the train of events leading to death.

It may be necessary to complete only (a), as for example, in a death from pulmonary tuberculosis with no complicating factors.

It may be necessary only to complete (a) and (b), as in death from uremia which developed as a result of chronic nephritis, in which case the uremia will appear in (a) and the chronic nephritis in (b).

In another instance, also involving uremia, which ensued from an acute nephritis following scarlet fever, the uremia will again appear in (a), the acute nephritis in (b) while scarlet fever will appear in (c).

Part II of the Medical Certification is to be used to cite any other significant conditions which unfavorably influenced the course of the morbid process, and thus contributed to the fatal outcome, but which were not part of the sequence of disease conditions directly causing death. Part II is important because any disease mentioned here may be decisive in determining the specific classification. For example, mention of mastoiditis in Part II when acute otitis media is stated in Part I will allow assignment of the death to a special category for a combination of these two conditions. Likewise, mention of arteriosclerosis of the kidney in Part II when hypertensive heart disease has been mentioned in Part I will allow a similar assignment.

It is most important, however, for physicians to remember that ordinarily, the mention of a condition in Part II will be taken to indicate the physician's opinion that it is secondary in nature, regardless of the severity with which it may generally be associated. For example, citing a cancerous lesion or leprosy in Part II will indicate to the nosologist that the disease or sequence of related conditions stated in Part I was, in the opinion of the attending physician, of more importance in causing death at this particular time than the malignancy or leprosy. Consequently, the death, in tabulation of primary causes, will be ascribed to the condition mentioned in Part I and not to cancer or leprosy.

The validity of future mortality statistics will therefore depend almost entirely on the care and judgment of the attending physician in correctly assigning the cause of death. Only by such care can future criticism be eliminated. For example, one death certificate was filled as follows:

I. Disease or condition directly leading to death (a) *Uremia and pulmonary edema*
Antecedent causes (due to (b) *Acute nephrasis*
(due to (c) *Transfusion with incompatible blood*

II. Other significant conditions: *Pulmonary tuberculosis*

This certificate was queried for additional information, as it was necessary to determine the reason for the transfusion. It was learned that the patient received a transfusion following a lobectomy, and with this information, the cause of death was assigned to pulmonary tuberculosis.

A more satisfactory certification would be as follows:

I. Disease or condition directly leading to death (a) *Pulmonary edema, uremia and acute nephrosis*
Antecedent causes (due to (b) *Reaction from incompatible blood transfusion following lobectomy*
(due to (c) *Pulmonary tuberculosis*

II. Other significant conditions: (leave blank)

The conditions under (a) follow in reverse to the order of their appearance. Under (b) note that "Reaction from" is added to "incompatible transfusion," because the *"morbid condition"* is requested. Under (c) the underlying disease responsible for the train of events is named, and nothing need be added under "Other significant conditions."

Causes for which an operation had been performed are preferred over all other conditions if a complication arises.

The need for this care may be seen in the fact that on one of the neighbor islands, the tenth prevailing cause of death is assigned to "Senility," which is an ill-defined and almost meaningless term.

This is a challenge to all attending physicians to guard against faulty and careless assignments of death.

J. R. ENRIGHT, M.D.

MAHALO AND ALOHA TO DR. NORMAN R. SLOAN

Dr. Norman R. Sloan leaves Kalaupapa Settlement and the Territory this spring after ten years of invaluable medical missionary service to them both. As resident Medical Director of Kalaupapa since 1940, he has, with the assistance of Mrs. Sloan, given generously of his professional skill, his personal kindliness and his abilities, to the end that leprous patients might be healed and the amount of leprosy in the Territory might be reduced.

He accomplished these aims, and more besides. Under his direction, the sulfone treatment program was started in Hawaii as soon as it became clear that it was more than merely experimental. Dr. Sloan has already added one report of its results to the accumulated world literature on this subject, and another report, read before the Territorial Medical Association eight months ago, is in press, to be published simultaneously in the HAWAII MEDICAL JOURNAL and in the *International Journal of Leprosy,* in June.

One of his rare absences from Kalaupapa was spent, in 1948, in attending the Fifth International Leprosy Congress, in Havana, to which he was an official delegate of the Territory, and at which he read a paper on sulfone treatment of leprosy of the larynx, the only paper dealing with that particular subject which was read at the Congress.

The Board of Health's responsibility in finding adequate replacement for Dr. Sloan, and in correcting the situation which led to his departure, weighs—we feel sure—very heavily upon its collective shoulders. Dr. Sloan possessed an unusual combination of valuable talents, and it will not be easy to find his like again. Mahalo, Norman, and aloha! And the best of luck to you in your new post, wherever it may be.

HELP *CARE* GET NEW BOOKS FOR OLD LIBRARIES

Many of the oldest and finest medical libraries in the world have suffered enormous losses of essential books as a result of the war. Physicians of the U.S.A. have given generously of used books, chiefly outdated editions, to both practicing physicians and libraries in these war-damaged lands, but this is not enough. Good medical practice requires good medical libraries, and good medical libraries require good—and up-to-date—medical books.

CARE—the same agency that has done such a magnificent job of sending food to these countries, has a book program the purpose of which is to provide these damaged libraries with new texts and reference works. They have gone about the job sensibly and efficiently; they know what the needs are in each institution, and they have had expert advice in how to best fill those needs. All they need now is financial help.

And that's where *you* come in. This is your opportunity to share in an important way in the rebuilding of the world's medical education. This is a responsibility physicians cannot shrug off,—especially physicians of the United States. Please read *CARE's* advertisement (we didn't charge them for it) in this issue of the JOURNAL, and please send some money *to us* for transmittal to them. If you give more than $10, your name can be placed in the front of the books purchased with your donation; or your donation can be made a memorial for someone else, if you prefer.

MEDICAL NEWS

Retarded growth in children responds dramatically to **oral vitamin B_{12}.** Ten micrograms daily produced rapid improvement in 5 of 11 children hospitalized because of malnutrition and growth failure. Resulting growth acceleration was over and above that obtained by ordinary vitamin supplements and liver extract in a control group. The mechanism of B_{12}'s stimulating effect on appetite is unknown, since with the exception of pernicious anemia no clinical syndrome of B_{12} deficiency is recognized. (Wetzel, N.C., *et al., Science* 110:651 [Dec. 16] 1949.)

Not just another article on antibiotics is the final report by Meleney, et al., on the use of **Bacitracin intramuscularly.** A coordinated study in six medical centers showed favorable responses in two-thirds of 270 patients. Many of these patients had **overwhelming infections and stubborn undermining ulcers** (synergistic gangrene) which had not improved on penicillin, sulfonamides, streptomycin, and aureomycin.

Renal irritation, manifested by albumin, granular casts and leukocytes in the urine, with a rise in blood NPN and urea nitrogen, was frequent. This cleared promptly (and so far permanently) after completion of Bacitracin therapy. The authors did not feel that such renal irritation required interruption of therapy, unless the NPN rose to more than double the normal value. Likewise, Bacitracin was not withheld because of preexisting albuminuria (often due to the infection itself).

Bacitracin is considered safe enough for general use, but only in hospitals where daily urinalyses and frequent blood NPN estimations can be done. Because of its nephrotoxicity, Bacitracin should be reserved for the most serious infections, where it is frequently lifesaving.

This article is a milestone. (*S.G.&O.* 89:657 [Dec.] 1949.)

Menorrhagia may be due, partially at least, to increased levels of heparin-like substances in the blood of menorrhagic women. Venous blood was titrated with protamine sulfate, an inhibitor of heparin, and increased titrations were found in 80 (75%) of 106 tests done during menorrhagic periods. (Elghammer, R.M., et al., *S.G.&O.* 89:764 [Dec.] 1949.)

Of more practical interest is the cessation of excessive flow in a majority of these women after a single intramuscular injection of **protamine** (50 mg.). Best results occurred when the injection was given on the second or third day, rather than on the first. Fair results were also obtained with the oral administration of **toluidine blue** in capsules, 100 mg. twice daily for 3 or 4 days. Protamine and toluidine blue are also useful in controlling the bleeding which occurs in certain blood dyscrasias, after overdosage with heparin, and after radiation injury to bone marrow.

Sodium succinate is recommended as a much safer analeptic than picrotoxin in the treatment of **barbiturate poisoning,** by Barrett (*Ann. Int. Med.* 31:739 [Nov.] 1949). A 30 per cent solution is given intravenously, 5 cc. by syringe very rapidly, and then a rapid drip until the patient awakens. From 15 to 200 cc. were given to a series of 15 patients. All recovered, and most were awake and oriented in much shorter periods of time than occurs after other analeptics.

Sodium succinate's greatest advantage, however, is that it never produces convulsions. Picrotoxin and coramine do produce convulsions, which have occasionally led to death, when the diagnosis of barbiturate poisoning was in error. Sodium succinate is marketed as "Soduxin" by Brewer and Company, Worcester, Massachusetts.

Conteben, a thiosemicarbazone, which has been used in Germany in the treatment of over 10,000 patients with tuberculosis, is now under study in this country. Most successful in early exudative, mucous membrane, and cavernous types of **tuberculosis,** Conteben is of little value in the meningeal and miliary forms of the disease. Streptomycin, para-aminosalicyclic acid, and Conteben possess different modes of action on the tubercle bacillus, and combinations of these drugs may prove synergistically effective. Toxic effects include gastritis, hemolytic anemia, exanthems, and agranulocytosis. (Three articles, *Am. Rev. Tuberc.* [Jan.] 1950 and Editorial, *J.A.M.A.,* 142:342 [Feb. 4] 1950.)

Exhaustion and vomiting which accompany **whooping cough** can be severe enough to threaten life. An effective and safe method of suppressing the paroxysms is the oral administration of **Visammin** (also known as Khellin) according to Khalil and Safwat (*Am. J. Dis. Child.* 79:42 [Jan.] 1950). This drug has been under considerable study recently as a coronary vasodilator and bronchial antispasmodic. The figures and charts demonstrating the anti-tussive effect of Visammin are impressive.

Antihistaminics often fail to relieve **bronchial asthma** when given orally, but Rubitsky, et al., report that they are highly effective when given parenterally or by aerosol. Severe paroxysms were interrupted in 10 of 15 patients who were given Benadryl or Pyribenzamine in this way. They also noted an "adrenergic potentiation," or restoration of effectiveness of adrenalin. Anything which will abolish adrenalin-fastness in a chronic asthmatic in the throes of status asthmaticus is certainly a welcome adjunct. (Rubitsky, H. J., et al., *N. Eng. J. Med.* 241:853 [Dec. 1] 1949.)

Vitamin E is now recommended for **menopausal flushing** (McLaren, H. C., *Brit. M. J.,* p. 1378 [Dec. 17] 1949) and **intermittent claudication** (Ratcliffe, A. H., *Lancet* 2:1128 [Dec. 17] 1949). The only condition it seems not to be useful in is impotence in rabbits (an admittedly rare syndrome).

Frankly admitting that almost everything but desiccated yak's milk has been successfully used in treating the **vomiting of pregnancy,** Dorsey recommends **suprarenal cortex** combined with **pyridoxine.** Intramuscular injection of 25 mg. pyridoxine with 0.5 cc. of suprarenal cortex (Armour or Upjohn) resulted in cure of one-third of 62 cases with one injection, one-half with two injections, and a total cure rate of 95 per cent. This he contrasts with the cure rate of 65 to 75 per cent usually obtained with pyridoxine alone. (*Am. J. Obst. and Gyn.* 58:1073 [Dec.] 1949.)

C. A. DOMZALSKI, JR., M.D.

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RECENT ACQUISITIONS

Biography

Thompson, Morton. *The cry and the covenant.* c1949. (gift of Dr. Edward Matsuoka.)
Zahorsky, John. *From the hills.* c1949. (gift of publisher.)

Cardiology and Hematology

Custer, R. P. *An atlas of the blood and bone marrow.* c1949. (gift of publisher.)
Dry, T. J. *Congenital anomalies of the heart and great blood vessels.* c1948. (gift of publisher.)
Flynn, J. E., ed. *Blood clotting and allied problems.* 2nd conference. 1949. (gift of Josiah Macy, Jr., Foundation.)
Levine, S. A. *Clinical auscultation of the heart.* c1949. (gift of publisher.)
Zweifach, B. W., ed. *Factors regulating blood pressure.* 1st conference. 1947. (gift of Josiah Macy, Jr., Foundation.)

Clinical Medicine

Chatton, Milton. *Handbook of medical management.* c1949. (gift of publisher.)
Kolmer, J. A. *Clinical diagnosis by laboratory examinations.* 2nd ed. c1949. (gift of publisher.)
Sunderman, F. W. *Normal values in clinical medicine.* c1949. (gift of publisher.)

Digestive Diseases

Kantor, J. L. *Handbook of digestive diseases.* 2nd ed. c1949. (gift of publisher.)
McLester, J. S. *Nutrition and diet in health and disease.* 5th ed. c1949. (gift of publisher.)

Mental Hygiene

Lemkau, P. V. *Mental hygiene in public health.* c1949. (gift of publisher.)
Weiss, Edward. *Psychosomatic medicine.* 2nd ed. c1949. (gift of publisher.)

Nursing

Hansen, H. F. *A review of nursing.* 6th ed. c1949. (gift of publisher.)
Miller, N. F. *Gynecology and gynecologic nursing.* 2nd ed. c1949. (gift of publisher.)
O'Hara, F. J. *Psychology and the nurse.* 3rd ed. c1949. (gift of publisher.)
Price, A. L. *The American nurse's dictionary.* c1949. (gift of publisher.)
Randall, Margaret. *Ward administration.* c1949. (gift of publisher.)

Ophthalmology and Otolaryngology

Berens, Conrad, ed. *The eye and its diseases.* 2nd ed. c1949. (gift of publisher.)
Boies, L. R. *Fundamentals of otolaryngology.* c1949. (gift of publisher.)
Duke-Elder, Sir Stewart. *The practice of refraction.* 5th ed. c1949. (gift of publisher.)

Pediatrics

Hardcastle, M. V. *For the new mother.* c1948. (gift of publisher.)
Senn, M. J. E., ed. *Problems of early infancy.* 1st, 3rd conference. 1947, 1949. (gift of Josiah Macy, Jr., Foundation.)

Pharmacy

Jones, J. M., ed. *Physician's desk reference to pharmaceutical specialties and biologicals.* 1950. (gift of Dr. I. L. Tilden.)
Lee, C. O. *The official preparations of pharmacy.* c1949. (gift of publisher.)
Mackenzie, C. G., ed. *Biological antioxidants.* 1st-3rd conference. 1946-48. (gift of Josiah Macy, Jr., Foundation.)

Sexual Ethics

Bloch, Dwan. *Anthropological studies in the strange sexual practices of all races in all ages.* c1933. (gift.)
Bryk, Felix. *Voodoo-Eros.* c1933. (gift.)
Ellis, Havelock. *Studies in the psychology of sex.* 4v. c1905-15. (gift.)
Lacroix, Raul. *History of prostitution.* 2v. c1941. (gift.)

Surgery

Christopher, Frederick, ed. *Textbook of surgery.* 5th ed. c1949. (gift of publisher.)
Farabeuf, L. H. *Précis de manual opératoire.* 1889. (gift of Medical Group.)

Tropical Medicine

American Public Health Assn. *Diagnostic procedures for virus and rickettsial diseases.* c1948.
Craig, C. F. *Clinical parasitology.* 4th ed. c1945.
Craig, C. F. *Laboratory diagnosis of protozoan diseases.* 2nd ed. c1948.
Hudson, E. H. *Treponematosis.* c1946.
Hunt, V. L. *How to live in the tropics.* c1942.
Lewis, G. M. *An introduction to medical mycology.* 3rd ed. c1948.
Monnig, H. O. *Veterinary helminthology and entomology.* 3rd ed. c1949.

Newburgh, L. H., ed. *Physiology of heat regulation and the science of clothing.* c1949. (gift of publisher.)
Reed, A. C. *Handbook of tropical medicine.* Rev. ed. c1944.
Swartz, J. H. *Elements of medical mycology.* 2nd ed. c1949.
Van Rooyen, C. E. *Virus diseases of man.* c1948.

Miscellaneous

American Cancer Society. *Proceedings of the first national cancer conference.* c1949. (gift of the American Cancer Society.)
Beecher, H. K. *Resuscitation and anesthesia for wounded men.* c1949. (gift of publisher.)
Kraus, Hans. *Principles and practice of therapeutic exercises.* c1949. (gift of publisher.)
Luck, J. M., ed. *Annual review of physiology.* v. 1-10. Index. 1949.
Netter, F. H. *The Ciba collection of medical illustrations.* c1948. (gift of publisher.)
Reifenstein, E. C., ed. *Metabolic interrelations.* 1949. (gift of Josiah Macy, Jr., Foundation.)
Riggins, H. M., ed. *Streptomycin and dehydrostreptomycin in tuberculosis.* c1949. (gift of Tuberculosis Association.)
Stieglitz, E. J. *Geriatric medicine.* c1949. (gift of publisher.)
U. S. Public Health Service. *The Chicago-Cook County health survey.* c1949. (gift of publisher.)

Two articles on leprosy by local doctors appeared lately, one by **Dr. Harry L. Arnold, Jr.,** on "Macules of leprosy," in the *Archives of Dermatology & Syphilology,* December, 1949; the other, by **Dr. J. S. Horan,** formerly at Queen's Hospital, and now of the Gailor Psychiatric Hospital in Memphis, Tennessee, on the "Treatment of lepra reaction and acute neuritis and arthritis with nerve block and intravenous administration of procaine" was published in the last issue of the *International Journal of Leprosy.*

The Library wishes to acknowledge the following subscriptions to sections of *Excerpta Medica:*

Pediatrics—Medical Group
Surgery—Surgical Society
Endocrinology—Medical Group
Dermatology—Dermatological Society
Internal Medicine—American College of Physicians. Hawaii Chapter
Obstetrics and Gynecology—Medical Group
Ophthalmology—**Dr. William John Holmes**
Radiology—**Dr. Louis L. Buzaid**
Neurology and Psychiatry—**Dr. Mon Fah Chung**

There are several other important sections, such as *Otorhinolaryngology, Tuberculosis,* etc., which we are anxious to continue, and which have proved most valuable in reference work. We would be grateful if any doctor or group of doctors would subscribe to these sections of the *Excerpta,* as our budget unfortunately will not cover this expenditure for 1950.

Dr. Richard H. P. Sia has been good enough to turn over his back files and current issues of the *Proceedings of the Society for Experimental Biology and Medicine* to the Medical Library. This will continue the important files originally contributed by The Clinic.

The Library wishes to acknowledge with gratitude the gift of a large collection on ophthalmology and otolaryngology from **Dr. G. M. Van Poole.** The books will not only enrich these particular fields, but also add much to the value of the collection as a whole.

We were honored last month by a visit from **Sir Philip Manson-Bahr,** who was passing through Honolulu on his way to Fiji to work on problems of the transmission of filariasis. He admired our collection on tropical medicine, and commended us highly.

BOOK REVIEWS

Handbook of Medical Management. By Milton Chatton, A.B., M.D.; Sheldon Margen, A.B. M.D. and Henry D. Brainerd, A.B., M.D. First Edition. 476 pp. Price $3.00. University Medical Publishers, Palo Alto, California, 1949.

This book represents the first real publication by the publishers of the well known "Physician's Handbook." The authors are well grounded in their respective fields, and the result in this book is a meaty treatise on therapeutics. The book is pocket size and is stiff paper bound so that it can be easily carried by the physician. Short descriptions of each disease precede a 1-2-3 arrangement. Tables with comparison of activities of various related drugs are frequent. Terminology representing both U.S.P. and the British Pharmacopoeia is used throughout. In the back there is a table of abbreviations and measurements.

A novel arrangement of the table of contents allows the reader to turn rapidly to the section in which he is particularly interested. This is done by the use of black tabs which correspond with tabs throughout the book. Another helpful point is the use of the standard nomenclature with the diagnostic and symptomatic numbers in brackets along side.

The book is up to date: it mentions such recent strides as Compound E and ACTH. The publishers have promised to revise and bring their handbook of therapeutics up to date each year. In view of the rapid changes which are taking place in therapeutics, this will be of great help to the average practitioner who is far too busy to read the prodigious amount of literature concerning these advancements.

This book fits a need for the average doctor in that it covers rational therapy in a readily understandable form with the minimum of verbiage. I wholeheartedly recommend it for doctors in all fields, but it is particularly valuable for the physician who does general practice and general medicine.

MORTON E. BERK, M.D.

The Ciba Collection of Medical Illustrations. Prepared by Frank H. Netter, M.D. 1948. Price $6.50. 222 pp. Ciba Pharmaceutical Products, Inc., Summit, New Jersey, 1948.

The Ciba Collection of Medical Illustrations is a compendium of magnificent colored plates prepared by Dr. Frank H. Netter. Most physicians are familiar with this artist's work since the illustrations have been previously distributed to the medical profession in portfolio form by the Ciba Pharmaceutical Company.

The anatomy and pathology of the lungs and chest, the entire gastrointestinal tract, the male reproductive organs, the male and female breast and the heart and aorta are included in the volume. Each plate is accompanied by a concise but surprisingly complete discussion of the anatomic or pathologic condition under consideration. It is contemplated that future additions will result in a complete atlas of surgical and pathologic anatomy. I have always felt that the subject material was oversimplified, but this criticism does not detract from its teaching value. This atlas is highly recommended.

I. L. TILDEN, M.D.

Normal Values in Clinical Medicine. By F. William Sunderman, M.D., Ph.D., and Frederick Boerner, V.M.D. 845 pp. with 237 figures and 413 tables. Price $14.00. W. B. Saunders, Philadelphia and London, 1949.

This work is the outgrowth of the sentiment expressed by Lord Kelvin, "When you can measure what you are speaking about and express it in numbers, you know something about it; when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind."

With the help of an imposing array of collaborators, the authors have compiled a set of normal values which embrace all the phases of clinical medicine, including the allied sciences of anatomy, pathology, physiology, and radiology.

One inescapable result of the specialization and progress in medicine has been the development of innumerable tests and measurements. Probably also unavoidable is the inability of the average physician to keep abreast of these data and their significance. Thus, this book fills a great need by helping the doctor in his omnipresent task of evaluating clinical data on the basis of normal variations. Where applicable, the authors also review pertinent physiology and anatomy. Throughout all sections, the bibliography is certainly adequate.

Presenting nothing new, the value of this book lies in its orderly, comprehensive presentation of normal values in a concise, workable form. The reviewer knows of no other book which presents this material.

GILBERT B. STANSELL, Major, M.C., U.S.A.

The Chicago-Cook County Health Survey. Conducted by the United States Public Health Service. Pp. 1317. Price $15.00. Columbia University Press, New York, 1949.

This is a reference type of publication. It covers the findings of a team of "experts" which studied health conditions and practices in a populous area of 4,000,000 people. The method of approach is unique and was apparently effective in this metropolitan area. National standards compiled by the U. S. Public Health Service and other national organizations were used for measuring the quality and quantity of health services in Chicago and its environs. These standards are rather strict and Chicago did not measure up to them in many cases. The recommendations for improvements seem to be reasonably justified.

Health problems are very similar throughout our country and many of those mentioned for Chicago apply also to Honolulu. Except in the fields of sewage disposal, refuse collection, premature infant program and dental health, it would appear that Honolulu would come closer to meeting the standards than Chicago.

A person interested in any one of the numerous health problems covered would, I believe, derive considerable interest and benefit from reading the chapter on that problem, if only from the standpoint of learning a good method of critical analysis of the way the problem is handled.

C. L. WILBAR, JR., M.D.

Physiology of Heat Regulation and the Science of Clothing. Edited by L. H. Newburgh, M.D. 457 pages, 78 figures, 38 tables, 15 authors. Price $7.50. W. B. Saunders Company, Philadelphia & London, 1949.

The first word in the index is *Aborigines* (of Australia); the last is *yurt* (a Mongol tent). The first picture is a diagram of an Eskimo igloo; the last is an electrically heated manikin, life size, used in the U. S. Army Quartermaster Climatic Research Laboratory. From studies on sweat secretion to measurements of the exact effort needed to fold a given kind of cloth; from comparative ethnology to information about the size of mittens needed at 20 below zero; everything imaginable related to man's ability to protect himself against heat and against cold can be found within these covers. Parts are so technical no normal person could possibly understand them; parts are so vivid they might have come from a good article in a popular magazine. It depends on what's being talked about.

If the book is as reliable as it is impressive—and the reputation of the editor for skepticism, objectivity and scrupulous honesty is as good a guarantee of that as one would wish—then it's certainly an authoritative and exhaustive treatise which should be owned by everyone interested in everything from air conditioning to selling clothes.

HARRY L. ARNOLD, JR., M.D.

An Atlas of the Blood and Bone Marrow. By R. Philip Custer, M.D. 321 pp. with 285 figures, 42 in color. Price $15.00. W. B. Saunders Company, Philadelphia and London, 1949.

This volume supplies a much needed source of useful information in one of the most rapidly explored fields in medicine. All the known disorders of the hematopoietic system are classified, and the more common varieties depicted in greater detail. An attempt has been made to standardize the nomenclature of the diseases, as well as the various types of blood cells. The outstanding feature lies in the profuse illustrations of the bone marrow with photomicrographs, some of them in color.

This volume will be a welcome reference for all those interested in the morphological aspect of hematology.

T. F. FUJIWARA, M.D.

A Textbook of Surgery. By American Authors; Edited by Frederick Christopher, B.S., M.D., F.A.C.S. Fifth Edition 1550 pp. with 1465 illustrations on 742 figures. Price $13.00. W. B. Saunders Company, Philadelphia and London, 1949.

This fifth edition of Dr. Christopher's classic text is a compilation of the highlights of all surgical knowledge of the world today. It has been brought up to date in relation to recent advances in surgical techniques, diagnostic procedures, and therapeutic measures including antibiotics, anticoagulants, and sympatholytic and other drugs. The subject matter is most comprehensive and embraces the specialty fields as well as general surgery. The list of contributors reads like a Who's Who in surgery and each subject is presented and discussed by acknowledged masters in that particular specialty.

In addition to revision and renewal of each unit of the book to the current thoughts and trends, there are also many new subjects presented by the accepted authorities on the discussed diseases.

Comparison of the subject matter of this edition with the preceding ones gives striking testimony to the amazing advances made in the surgical field in the last few years.

Even a cursory examination of this book is adequate to explain its universal acceptance as the standard text for surgery in American medical schools.

JAMES W. CHERRY, M.D.

Helpful Hints to the Diabetic. By William S. Collens, B.S., M.D. and Louis C. Boas, A.B., M.D. 135 pp. Price $3.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This book breaks down the complexities of diabetes so that the average lay individual who has the disease, or is interested in it, can understand it. It covers all the angles from the standpoint of diet; how to administer insulin; the different types of insulin; the complications; and other ramifications which frequently puzzle the person with diabetes.

The book is easy to read. There is a glossary in the back which defines such words as *enzyme, metabolism, dextrose,* and, oddly enough, *quack.* There is one whole section of the book devoted to illustrating a type of quackery which tries to take advantage of the diabetic who is always seeking the complete cure. This section is written on the basis of material taken from the *A.M.A. Journal* and from actual cases which came up in courts in the United States.

There is no question but that this book is a valuable adjunct to the explanation which is given a patient by his doctor. There are questions and answers in the back which are of the type most frequently asked.

My only criticism from our standpoint in the Territory would be that many of the foods which are staples out here are not included in any of the dietary tables. Aside from this, I whole-heartedly recommend this book for the diabetic patient and his family.

M. E. BERK, M.D.

For the New Mother. By Mildred V. Hardcastle, R.N. First edition. Price $2.00. John C. Winston Company, Philadelphia, Pa., 1948.

At first glance just another set of instructions on the care of infants in the first year of life, this handbook proves to be equally a guide to the care of mother in that trying period. Written by a mother-housewife-nurse, it gives concrete guidance in those matters which frustrate and dissolve the proud product of modern civilization when she takes up home life with baby. For this and for the careful detail with which it tells how to carry out the tasks and meet the problems of care and training through the first year, it is recommended.

However, in spite of being conversational in tone, its rapid-fire delivery and the minuteness of its detail may limit its usefulness to those accustomed to reading something heavier than movie magazines and lurid short stories. It should fill the need of the educated, conscientious mother who is a stranger to babies; it may give teaching hints to students and novices in the field of visiting nursing; and it should be of special value where the mother's emotional equilibrium is threatened by the new demands to be made upon her.

LOUISE S. CHILDS, M.D.

From the Hills. By John Zahorsky, M.D. 388 pp. Price $4.00. C. V. Mosby Company, 3207 Washington Blvd., St. Louis, Mo., 1949.

This is the story of pediatrics, as a specialty, as related by one of its builders. A man of foreign birth, raised from infancy on the soil of America, he kept his feet always firmly planted on the ground. A man of great intelligence and persistence, he succeeded where others failed, and because of his innate common sense and clarity of vision, he was able to avoid the fads and fancies of the period in which he lived and worked.

The story is full of incidents and analyses which serve as guiding beacons to those who follow. It is a story that should be read by everyone interested in pediatrics, and I could say that any physician would be a better doctor as a result of having read it.

DONALD C. MARSHALL, M.D.

Congenital Anomalies of the Heart and Great Vessels. By Thomas J. Dry, B.A., M.A., Ch.B., M.S. in Medicine, et al. 68 pp. Price $4.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This book is an excellent supplement to Maude Abbott's *Atlas of Congenital Cardiac Heart Disease.* If Maude Abbott's work is an Atlas, this is certainly a Baedeker. The six authors from the Mayo Clinic have presented in printed form an exhibit shown at the American Medical Association meeting in June of 1947. The presentation of fifteen congenital cardiac and vascular defects is clear cut. The chief advantage of this presentation is that there is a minimum of wordy descriptions and a good deal of objective information. Photographic reproductions of x-rays of these anomalies which have been proven at autopsy are very helpful.

My chief criticism of the book is that it is too short. There are two roentgenograms of tetralogy of Fallot but only one of each of the other anomalies mentioned. One wishes there were more, as it is possible there might be some variation in other cases. It is however extremely helpful, when presented with the possibility of a rare anomaly in an infant, to be able to turn to this book to find diagrams, roentgenograms and occasionally electrocardiographic evidence with which to compare the findings in the patients under observation. The authors also went to considerable trouble to collect sixteen photographs of historical interest depicting the persons who have contributed to the knowledge of congenital heart diseases.

I am sure I will find this a useful book for a long time to come and I am going to buy it.

ALFRED S. HARTWELL, M.D.

A Review of Nursing. By Helen F. Hansen, R.N., M.A. Sixth Edition. 866 pp. Price $4.25. W. B. Saunders Company, Philadelphia, 1949.

The general plan of the sixth edition is essentially the same as the previous one. There is some revision of the outlines and a few changes in titling; for example, "History of Nursing" has been renamed "Historical Foundation of Modern Nursing." This is followed by "Professional Foundations and Relationships." This change tends to emphasize the fact that a knowledge of historical background is essential to the understanding of present day nursing.

Certain material which appeared in several chapters of the previous edition has been consolidated and greater care has been taken to prevent unnecessary repetition. An effort has been made to bring materials up to date: attention has been given to treatments which developed during or as a result of the last war; new drugs and anesthetics are included; preventive measures and psychological aspects are stressed to a greater extent; geriatrics receives greater attention; war problems have been changed into civilian problems.

The number of true-false questions has been reduced. On the other hand, there are more situation-type questions in which a combined knowledge of anatomy, physiology, microbiology, diet therapy, etc. is required for solving. Some effort has been directed to stimulate research and the use of reference material by including items within the questions which are not covered in the outlines.

Since the material is arranged under definite subject matter categories, and since this subject matter is, of necessity, limited, "A Review of Nursing" cannot be considered an adequate review for the Territorial Board Examinations as they are now given. This book would serve better as a guide to further study and research.

INEZ M. LANGE, R.N.

Therapeutic Exercises. By Hans Kraus, M.D. 336 pp. with 290 illustrations. Price $6.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This publication voices in a satisfactory way the newer concept of therapeutic exercises largely resulting from the boost given by the World War II "military" and yet combines satisfactorily the older time worn dictums so long stressed by such writers as Wright and Merrill. The text seems to have departed from the baleful influences of the Kenny system and yet the better ideas of that very system which existed after all before Sister Kenny, are included. He has been wise in not including the Kenny nomenclature.

Chapter Two on "Measurements" could advantageously have been longer and more specific. The illustrations are good and many important points are brought out. The important measurement of hip contractures and motion might have been discussed advantageously. Only twelve pages are devoted to this subject (four of them devoted to illustrations).

The Chapter on "The Treatment of Pain and Painful Muscle Spasm" is particularly valuable in stressing such principles as "Never pass the pain limit" and "Never cause pain by movement." It is felt by the reviewer, however, that the including of the technic of surface anaesthesia in a book intended for the "malihini" in physical therapy is rather out of place. This was done, however, with malice and forethought by the author in view of his own success with this generally seldom used technic.

For the more advanced physical therapist more footnote documentation would have been appreciated on some of the controversial points. In this way the long bibliography included at the end of the book and occupying fifteen valuable pages, could have been used to better advantage. In only three instances were definite references made and these were all to the author's own publications.

All in all, however, the book justifies the favorable comment made by Rush who writes the foreword and who himself has contributed to the modern concept of physical therapy. It should be included on the bookshelf of the practicing physical educationalist.

J. WARREN WHITE, M.D.

The Official Preparations of Pharmacy. By Charles Oren Lee, Ph.D. 528 pp. 32 illustrations. The C. V. Mosby Company, St. Louis, 1949. Price $5.50.

This book is essentially a text for the use of students of pharmaceutical technology, as part of a course in general pharmacy, and it seems, to the pharmocologic layman at least, an excellent one. The organization is logical, the style is concise and clear, the discussions are lucid and thought-provoking, and the format of the book is easy on the eyes.

To the dermatologist, at least, there is much of interest for the practicing physician. How many practitioners are aware, for example, that Burow's solution (even if they know it isn't spelled "Burroughs") may contain 0.6 per cent of boric acid to minimize alkalinization and clouding on exposure?

Although "blue ointment" is said to be "used as an antiparasiticide," whereas it is, actually, a virtually obsolete *parasiticide,* it is refreshing to see that even 5 per cent ammoniated mercury ointment is stated to be capable of producing "serious skin damage," and that Iodex ointment, "a popular over-the-counter item," is said to be of "questionable value."

HARRY L. ARNOLD, JR., M.D.

Surgical Clinics of North America. Nationwide Number, Symposium on Recent Advances in Surgery. Pp. 1283-1611. Price $18.00 per clinic year in cloth, $15.00 per clinic year in paper binding. W. B. Saunders Company, Philadelphia and London, 1949.

This number on the recent advances in surgery differs from the usual Surgical Clinics in that it presents articles on topics of general surgical interest from a number of different medical centers over the country. In this manner, a cross section of the range of surgical thought is presented in this one volume. The topics covered include most of the various aspects of a general surgical practice. In addition, there are digressions into the surgical subspecialties, touching upon some of the more common problems with which many general surgeons have to deal. The papers included are, for the most part, well thought out original contributions. Each presents the ideas of the individual author regarding the topic under discussion without attempt at exhaustive summaries though many of the papers have very inclusive bibliographies.

Every article in the symposium has its application to general surgical practice as seen away from the great centers of learning, and no space is given to the more restricted and specialized subjects which take up so much of the space in surgical journals. Some of the topics discussed with clearness and thoughtfulness are: Radical Operation and Palliative Therapy for Carcinoma of the Breast, by Thomas G. Orr; Appendicitis with Consideration of the Newer Drugs in Appendiceal Peritonitis, by Edwin P. Lehman, et al.; Advances in Management of Prostatic Diseases, by Cornelius W. Vermeulen; Modern Trends in Colonic Surgery, by Arthur W. Allen, et al.; and Acute Craniocerebral Trauma, by Ludwig H. Segerberg and R. Glen Spurling. Many others are equally good and this volume can be well recommended to the man who wishes new ideas and material on many of the every day problems of a general surgical practice.

G. C. FREEMAN, M.D.

Diseases of the Heart. By Charles K. Friedberg, M.D. 1081 pp. with 79 figures. Price $11.50. W. B. Saunders Company, Philadelphia and London, 1949.

This is a new up-to-date version of a cardiology textbook. In the light of all the new physiologic mechanisms which have been studied and threshed out in the current literature, this book is a real milestone in that it takes advantage of the progress made.

Aside from standard advice on therapy and diagnostic procedures, Friedberg has inserted and discussed fully the physiology and pathology involved in the various forms of heart disease. For the medical student this should be very enlightening because it brings into the same sharp focus both the clinical and the didactic viewpoints. For the practicing physician who wishes to bring himself up-to-date on the latest theories of heart physiology and pathophysiology, there is much concentrated information available in this text. The section on congestive heart failure is particularly informative. There is also information on electrocardiography which will be interesting to students of this laboratory procedure.

This is the type of book which I personally have been looking for, as it is an improvement over the standard texts of White, Levine, and Stroud, and it does cover all the various little problems, such as infection in pregnancy, etc., that are so often confusing to the practicing physician.

MORTON E. BERK, M.D.

Psychology and the Nurse. By Frank J. O'Hara, C.S.C., Ph.D. Third Edition. 253 pp. with 17 figures. Price $2.75. W. B. Saunders Company, Philadelphia, 1949.

As in his two previous editions, the author's major purpose is to present the fundamental principles of general psychology to freshmen students in schools of nursing. In this third edition, he has reorganized the basic material so that it may be taught more easily and learned more effectively and he has introduced many new ideas in the field of psychology.

Those who have become weary of many of the contemporary psychologists and somewhat alarmed at their expressions of mechanistic theories will find O'Hara's textbook a pleasant relief and a valuable means of counteracting the tenets of those who teach that man is a mere behaving organism devoid of all sense of personal duty or responsibility.

The author outlines the Aristotelian-Scholastic theory of matter and of form, as its animating principle, and indicates its application to human nature. The laws of learning are treated adequately, as are habit development and proficiency, based on the plasticity of the nervous system. The review questions and summaries should help the student to understand the material, and the references, which are excellently chosen, should be of value to the instructor who wishes to teach the course on a more scholastic basis. Italicized definitions throughout the text have been used and the glossary omitted, thereby utilizing a valuable aid in learning. Abnormal mental states are discussed in relation to general psychology and afford a helpful introduction to a more detailed study of mental diseases.

One might question the advisability of devoting so much of the text to a study of the nervous system since this should be adequately covered in the student's anatomy and physiology course. The applications would be of more value if the author realized that nursing is a self-directing profession and is not limited to the care of the sick. Then, too, it appears that the author has attempted to fit his textbook into the heavy nursing school curriculum, necessitating a less scholarly presentation than instructors would desire. However, the book should stimulate the student to further study if properly used, for it emphasizes throughout the necessity of understanding the human organism thoroughly if the nurse is to be successful as a sound thinking leader in aiding humanity.

Even allowing for the above weaknesses, the book is heartily recommended to all who favor sound educational principles in the fundamental teaching of psychology.

MARGARET MALLEN, R.N., M.S.

The Skin Problem Facing Young Men and Women. By Herbert Lawrence, M.D. 69 pages. Price, not given. Timely Publications, Inc., San Francisco, 1949.

This book explains clearly and concisely what acne is, how it is caused, what is wrong with many common notions about it, and what can be done for it. Details of treatment are not given, except for sensible advice regarding the care of the skin. Emotional problems, both as contributory and resultant elements, are briefly considered. Conservative dietary advice is given. The style is direct and colloquial, occasionally at the expense of syntax, but this adds to the book's usefulness, for it is aimed at boys and girls with acne, and at their parents. It can be recommended to your patients without reservation, and perhaps you'd better read it yourselves!

HARRY L. ARNOLD, JR., M.D.

The Eye and Its Diseases. By 92 International Authorities: Edited by Conrad Berens, M.D., F.A.C.S. New, 2nd Edition. 1092 pp. with 436 figures, 8 in colors. Price $16.00. W. B. Saunders Company, Philadelphia and London, 1949.

This text book approaches the subject of ophthalmology in an ideal manner because outstanding men in the ophthalmic specialties have contributed. It is written for the physician who specializes in ophthalmology, and contains references on all subjects. Only a few of the most recent developments and therapeutic discoveries are not mentioned. Although intended for the specialist, there are sections which the general practitioner, and those practicing other specialties, can use, particularly those sections on hypertensive vascular disease, ophthalmoscopy, syphilis and tuberculosis. The section on medical jurisprudence is especially illuminating and can be used by any physician who might be called as a medical witness. Most sections of the book are stimulating and, being composed of the thoughts of so many men, prevent the book from becoming tiresome reading. It is recommended for all specialists, and for those practitioners who do not have the consulting service of an ophthalmologist.

Dr. Berens is to be commended for having secured the services of so many lucid writers and having them compiled into a very complete book.

OGDEN D. PINKERTON, M.D.

Handbook of Digestive Diseases. By John L. Kantor and Anthony M. Kasich. Second edition. 658 pp., 149 illustrations. Price $11.00. C. V. Mosby Co., St. Louis, Mo., 1949.

The Handbook of Digestive Diseases is fortunate in having been instigated by a man like John L. Kantor who was not only a gastro-enterologist but a roentgenologist as well. Kantor had originally planned this work to be a synopsis of digestive diseases. However, upon his death his associate Kasich took up the work, added considerably to it, and brought it up to date with the present trend, with lots of case reports, and a good summary of the present work in the field. I say that this book is fortunate in being instigated by a roentgenologist because certainly in practice much of our work today in gastro-enterology is closely associated with roentgenologic findings. We find this well emphasized in this book, though it is by no means a textbook of gastro-intestinal roentgenology. All sections of the book are well presented and the entire text is extremely readable.

I find in reviewing the book that there are very few omissions. One which we are beginning to recognize more frequently, and which was brought out about the time this book went to press, was that of prolapsed redundant gastric mucosa as presented by Kirkland in the Mayo Clinic a year or so ago. All of us have recognized the findings in the x-ray, but it only has been recently that Kirkland has attached significance to them, and even more recently that we have found that symptoms were relieved by resection of prolapsed redundant gastric mucosa.

All phases of gastro-intestinal diseases are considered including diseases of the mouth and allergy, and space is given to the psychiatric aspects of digestive diseases.

This is certainly an excellent book for the general practitioner as well as the specialist. It is up to date and follows the best trend of present day thinking.

L. CLAGETT BECK, M.D.

Resuscitation and Anesthesia for Wounded Men. Henry K. Beecher, A.M., M.D. 58 illustrations, 179 pp. Price $5.50. Charles C. Thomas, Pub., Springfield, Ill., 1949.

A gem of compend covering the wounded man, his mental and physical state, physiological derangements, treatment and proper anesthesia. This book is a must for emergency services handling seriously injured or casualties in large number. The advice on triage, plasma, serum albumin, whole blood transfusions and judicious use of morphine is timely for all, especially those planning civil defense programs. Every medical officer should memorize many of its passages. Surgeons and anesthetists will profit by his sound choice of the anesthetic agent.

Certainly Beecher was there—did a remarkably fine job—observed carefully—and critically recorded the results attained. The wounded profited.

R. B. FAUS, M.D.

COUNTY SOCIETY REPORTS

HONOLULU COUNTY MEDICAL SOCIETY

The regular January meeting of the Society was held on the first Friday of the month in the Mabel Smyth Auditorium. About 80 members and guests were present.

Dr. Robert Johnston presented a case report entitled Congenital Arterio-Venous Fistula of the Lung. Dr. Morton Berk spoke of the variety of medical experiences encompassed in his recent ten months' post-graduate study in California.

A plan for a post-convention tour of physicians to Hawaii following the AMA convention in San Francisco this June was presented and discussed. The membership voted overwhelmingly in favor of supporting the plan.

After prolonged discussion it was voted to contribute $2500 from our reserve fund to the Hawaii Visitors Bureau for their tourist promotion program for this year. It was also voted to instruct the Budget Committee to take into consideration, in the preparation of next year's budget, the probability that we would again be asked to make a similar contribution.

It was announced that the Board of Governors had recommended approval by the membership of the Public Service Committee's proposal to conduct a professional public opinion poll on Oahu. A motion not to conduct such a poll was defeated, and it was announced that the poll would be conducted on the basis of a voluntary assessment, provided the assessment returns were sufficient to pay for it.

It was voted to ask the City and County Physician's office and the administrators of the Honolulu hospitals to approve in selected cases the continuance of private physicians in charge of cases even after their transfer to the City and County service.

The revised fee schedule sections dealing with EENT fees and laboratory tests were approved without change on second reading and the neurosurgical schedule was approved without change on first reading.

* * *

The regular February meeting of the Society was held at the usual time and place. About 115 members and guests were present. The meeting was preceded by a color movie entitled Coarctation of the Aorta, which showed the clinical features of the disease and the entire course of an operation for its surgical correction. This was shown through the courtesy of Dr. Joseph L. Robinson of Los Angeles.

Dr. Verne C. Waite presented a paper on the modern surgical treatment of para-rectal and para-anal abscesses, illustrated by lantern slides, which was discussed by Dr. F. E. Flaherty, Director of the Providence Hospital Clinic in Seattle, Washington.

Dr. Joseph Robinson, of Los Angeles, presented a paper on the diagnosis and surgical correction of diaphragmatic (para-esophageal hiatus) hernia.

The Treasurer, Dr. William Walsh, presented the following budget for the coming fiscal year, which had already been circulated to the membership.

PROPOSED BUDGET FOR 1950-1951
HONOLULU COUNTY MEDICAL SOCIETY

EXPENSES	Budget 1949-1950	Est. Total Expenses 1949-1950	($85 Dues) Proposed Budget 1950-1951
Library	$ 7,000.00	$ 7,000.00	$ 7,000.00
(Excerpta Medica)		160.00	
Territorial Association Dues and Journal	6,182.00	6,348.00	8,100.00
Salaries	4,200.00	4,421.40	4,200.00
Postgraduate		842.86*	
Nursing Service Bureau	600.00	600.00	600.00
Rent	720.00	1,000.00	1,140.00
Telephone & Telegraph	250.00	226.25	250.00
Mimeographing & Printing	300.00	108.85	150.00
Supplies	425.00	401.44	425.00
Postage	300.00	300.00	300.00
Taxes		1.00	115.00
Entertainment	200.00	420.56	350.00
Audit and Legal	250.00	320.00	250.00
Miscellaneous	200.00	412.15	200.00
Auto Emblems	250.00	150.00	150.00
Furniture & Fixtures	50.00	——	50.00
Advertising	75.00	——	50.00
Chamber of Commerce	40.00	40.00	90.00
Hawaii Visitors' Bureau		2,500.00*	
	$21,042.00	$25,252.51	$23,420.00

INCOME	Budget 1949-1950	Est. Total Income 1949-1950	($85 Dues) Proposed Budget 1950-1951
Dues	$20,535.00	$21,068.34	$25,500.00
Auto Emblems	250.00	165.00	150.00
Miscellaneous	257.00	24.45	25.00
Fee Schedule		58.00	50.00
Rental of Equipment		71.32	70.00
	$21,042.00	$21.387.11	$25,795.00

* To be taken out of General Reserve Fund.

The budget, together with an increase in annual dues from $75 to $85, was approved by the members present.

The final sub-section of the revised contractual fee schedule, dealing with neurosurgical fees, was approved on second reading without correction or dissenting vote.

Refreshments were served following adjournment of the meeting at 9:30 p.m.

JOHN W. DEVEREUX, M.D.
Secretary

HAWAII COUNTY MEDICAL SOCIETY

The 292nd regular meeting of the Hawaii County Medical Society was a dinner-meeting held at The Seaside on Thursday evening, January 26, 1950. Members present were: Doctors Bernstein, Bergin, S. R. Brown, M. H. Chang, Crawford, Kasamoto, Kutsunai, Leslie, Matsumura, Miyamoto, Mizuire, Okumoto, Orenstein, Tomoguchi, Wipperman, and Yuen. Guests of the evening were members of the Subcommittee on Hospital, Medical Care, and Welfare of the Holdover Committee of the Legislature and included Rep. Sakakihara, its chairman, Dr. Richard Lee, Rep. Hiram L. Fong, Sen. Anzai, Rep. Ezell, Rep. Itagaki, Drs. Samuel Yee and Homer Izumi, Mr. V. Bradfield, Mr. Hugh Lytle, Miss Peggy West, and Miss W. Chang.

President Tomoguchi announced that (1) Dr. Fred Irwin was out of HMSA as of December 31, 1949,

and that (2) the position of Medical Director of HMSA was vacant and that this part-time position paid $300.00 monthly. The following motion was made by Dr. S. R. Brown, seconded by Dr. Orenstein and passed by the majority vote of the members present: "In view of the record of Dr. Fred Irwin as Medical Director of HMSA and of his value to HMSA and the medical profession of the Territory of Hawaii during the years that he has served in this position, the Hawaii County Medical Society recommends the reappointment of Dr. Fred Irwin as Medical Director of HMSA."

After dinner, the Chairman of the Subcommittee, Rep. Sakakihara, introduced the members of his subcommittee present and gave an account of the origin and purposes of his subcommittee. A general discussion followed; a great deal of discussion centered on the fact that the Territory subsidizes private hospitals but not County Hospitals, an act which greatly affects the counties of Hawaii and Maui; Dr. Richard Lee gave a report of the Medical Advisory committee of the subcommittee; the chairman suggested that this Society choose a chairman and form a County Advisory committee to the Medical Advisory Group of the subcommittee and Dr. Orenstein was chosen its temporary chairman. The function of this group is to study hospital problems in Hawaii and make recommendations—two strong positions were (1) to have territorial subsidies to county hospitals and (2) make county hospitals a part of the Territorial institutions.

ROBERT W. MIYAMOTO, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The September meeting of the Society was held on the 20th in the Maui Grand Hotel. Dr. Underwood presided; members present were Drs. Rockett, Ohata, Jim, Tofukuji, Shimokawa, Kanda, Burden, St. Sure, H. Kushi, E. Kushi, Sanders, A. Y. Wong, Izumi, McArthur, Fleming, Johnson, Ferkany, Toney, Cole and Kashiwa. Guests were Drs. H. E. Bowles, Pauline Stitt, and Lum.

A motion to amend the By-Laws to increase the dues to $37.50 was passed with 3 dissenting votes. A motion to amend the By-Laws to provide that the offices of the three Governors-at-Large be automatically filled by past three living, resident ex-presidents of the Society was also passed with 3 dissenting votes.

Dr. Elmer Johnson was admitted to membership in the Society.

Dr. Bowles talked on "Caesarian Sections." He informed the Society that obstetrical consultant service is available to any physician upon request to the Bureau of Maternal and Child Care of the Board of Health.

* * *

The regular January dinner meeting of the Society was held at the Maui Grand Hotel on January 17; Dr. Shimokawa presided and 17 members were present. Dr. H. E. Crawford, President of the Territorial Association, was present as a guest.

Dr. Joseph E. Malloy of Maunaloa, Molokai, was elected to regular membership. Dr. William Dunn, of Lahaina, was elected to Honorary Membership.

The Treasurer was instructed to bill members annually for $25 A.M.A. dues at the time of billing for Society dues.

Dr. Crawford discussed some of the problems that had come before the Territorial Association, and announced that the annual meeting of the Association would be held in Hilo on May 4-7 this year.

* * *

The February dinner meeting of the Society was held in the Maui Grand Hotel on February 6. Dr. Underwood presided, and 5 other members were present.

A Maui County Medical Advisory Committee to the Subcommittee on Hospitals and Medical Care of the Holdover Committee to the Legislature was appointed, as follows: Dr. Sanders (Chairman), Drs. K. Izumi, H. Kushi, Tompkins, Toney, Wilkinson (Lanai), Reppun (Molokai), Miura (Dental Society) and Miss Elizabeth Sheridan (Nurses' Association).

* * *

A breakfast meeting of the Society was held at the Puunene Athletic Club on February 12. Dr. Underwood presided, and 17 members were present.

Dr. Joseph Baer, Professor Emeritus of Obstetrics and Gynecology at Rush Medical College, Chicago, conducted a round-table discussion on obstetrical procedures and emergencies.

ROBERT F. COLE, M.D.
Secretary

TERRITORIAL MEDICAL ASSOCIATION REPORTS

MINUTES OF MEETING
COUNCIL

Wednesday, January 18, 1950, at 7:30 p.m.
Mabel Smyth Building

Present: Dr. Crawford presiding; Drs. R. O. Brown, Chung-Hoon, Hill, McArthur (Maui), Orenstein (Hawaii), F. J. Pinkerton, Tilden, and Wade (Kauai); also Dr. Hartwell (AMA delegate).

Minutes: The minutes of the June 23 meeting had been mailed to call members of the Council and accepted by them.

Insurance Examination Fees: Several months ago the New Jersey Medical Society notified us they had written to all life insurance companies doing business in their state, urging them to revise their medical examination fees upward. New Jersey recommended that other states take similar action. This met with the approval of our county societies and we have now written to all companies doing life insurance business in Hawaii, asking them to double their examination fees if possible, or at least to increase them. Seven of the large companies have already taken this step and we have had favorable responses from others. The House of Delegates of the American Medical Association feels that no drastic action should be taken at this time, since the companies are all aware of the problem and the desired end is being accomplished gradually.

AMA Post-Convention Tour: The Hawaii Visitors' Bureau has proposed to the Honolulu Association that mainland doctors and their families who attend the AMA convention in San Francisco next June be invited to come to Hawaii for a post-convention tour. The Visitors' Bureau is sending invitations to the state medical societies and will have representatives at the AMA convention to assist with all arrangements. Dr. Crawford and Dr. Arnold, Jr., have been asked to issue invitations from the Territorial and County Societies.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Tilden, the Council heartily endorsed the Visitors' Bureau plan for a post AMA convention tour to Hawaii.

AMA $25 Dues: Dr. Crawford reminded the Council that annual dues of $25 for the calendar year 1950 had been officially approved by the House of Delegates of the AMA at its interim session in Washington in December. These dues will be collected by the County Societies, and paid to the Territorial Association for transmissal to the AMA. A uniform letter will accompany the bills to members from each County Society. The draft of such a letter was presented and discussed.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Wade, the Council approved of the proposed letter to accompany the bills for $25 from each County Society to its members.

Amendments: The Council members were reminded that two amendments to the By-Laws were proposed at the last annual meeting by Dr. Gotshalk. One amendment was to provide for two meetings of the House of Delegates each year. The second amendment would limit any Councillor to two consecutive terms or a total of three terms. These amendments will be circulated to the membership 60 days before annual meeting and will be voted on at annual meeting.

New Shelves: The Medical Library has notified the Territorial Association that it needs the shelf space in the Library now occupied by old copies of the HAWAII MEDICAL JOURNAL. The Board of Management has considered the problem and suggested that shelves be built for this purpose in the attic of the Mabel Smyth Building.

ACTION: On motion of Dr. Tilden, seconded by Dr. Orenstein, Mrs. Bennett was authorized to have these shelves built at a cost of $120.

Hiscock Survey: A letter was received from the Oahu Health Council last month asking for a contribution of $100 toward the expenses of a proposed survey of public health in Hawaii to be made by Dr. Ira Hiscock of Yale. The total expense of about $3900 would be shared by various health agencies in Hawaii. It was pointed out that this money would not be spent until our next budget is adopted and could be included as an item in the 1950 budget.

ACTION: On motion of Dr. Orenstein, seconded by Dr. Wade, the Council approved an appropriation of $100 toward the expenses of a public health survey in Hawaii to be conducted by Dr. Ira Hiscock.

Chamber of Commerce: Mrs. Bennett reported that for several years she has been a member of the Public Health Committee of the Honolulu Chamber of Commerce. Her C. of C. membership fee of $40 has been paid, half by the Honolulu County Society and half by the Territorial Association. Since she is no longer working for the County Society, she asked whether the Council would like her to continue to serve on the Chamber Public Health Committee, and if so, whether they would care to pay the entire $40 for her Chamber membership. The Council agreed it was advisable for Mrs. Bennett to serve on the Public Health Committee.

ACTION: Dr. McArthur moved that the Territorial Medical Association should assume the $40 Chamber of Commerce membership fee for Mrs. Bennett until further notice. The motion was seconded by Dr. Wade and passed.

Annual Meeting: Mrs. Bennett reported on the tentative plans of the Scientific Works Committee for the program of the annual meeting to be held in Hilo May 4-7. Dr. Crawford and Dr. Orenstein told of the plans being made by the Hawaii County Society to entertain those who will attend.

Savings Account: In December the Bishop Bank reminded us that we had made no deposit in our savings account for five years. According to the bank's regulations, we would cease to draw interest on December 31, 1949, unless we made a deposit before that time. Mrs. Bennett conferred with Dr. Crawford, Dr. Chung-Hoon and Dr. Tilden. Reserving sufficient funds in the check-

ing account to carry us until July, the sum of $2200 was deposited in the savings account.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Orenstein, the Council approved the transfer of $2200 from the Association's checking account to its savings account.

Finances: Mrs. Bennett presented a financial statement showing the actual income and expense for the Association from the beginning of the fiscal year, March 1, 1949, to the present, as compared with the budget for the entire fiscal year. With six weeks of the fiscal year still to go, we have taken in $17,982.64 as compared with an estimated income for the year of $17,600. Our expenses to date have been $15,158.75, compared with an estimate of the year's expenses of $18,005.

AMA Delegates' Expenses: At the meeting of the Territorial House of Delegates last May, the following action was taken: "After considerable discussion it was moved by Dr. Patterson, seconded by Dr. Bell and passed, that the delegate be sent to one meeting and the alternate to the Interim meeting and that $800 be paid for each man for the year out of the public relations fund." The question of division of the expense money between the delegate and the alternate has arisen and the matter was referred to the Council by the President.

The Council agreed that the motion of the House of Delegates was improper in specifying that the delegate should be sent to one meeting and the alternate to the Interim meeting. The delegate is elected to represent the Territorial Medical Association. It is his prerogative to attend all sessions. He may ask the alternate to assist him or to substitute for him if he cannot go.

Reference to the By-Laws shows that the Council is the Finance Committee of the Association. Up to the time of the annual meeting in Kauai in 1947, the AMA delegate had always paid his own expenses. Since that time, there has been an appropriation for delegate's expenses from the public relations or public service funds each year. Last May, because there was so much controversy about the public relations program and its budget, that entire matter was referred to the House of Delegates by the Council. The House of Delegates directed the Public Service Committee to pay $1600 from its funds toward the expenses of the AMA delegate and alternate for the two meetings. Since both Dr. Pinkerton and Dr. Hartwell attended the June AMA meeting, but only Dr. Pinkerton went to the interim session, it was not clear how the money should be divided. Questioning by Council members brought out that the expenses of either the delegate or the alternate average about $800 for a meeting. The Council thought that since Dr. Pinkerton had found it necessary to attend both meetings, he should receive $1600, and Dr. Hartwell should be reimbursed to the extent of $800 for the one meeting he attended. The Public Service Committee had already been authorized to pay $1600.

ACTION: On motion of Dr. Brown, seconded by Dr. McArthur, the Council (Dr. Pinkerton not voting) appropriated $800 from the treasury of the Territorial Medical Association for additional expenses of the delegate and alternate.

It was further agreed by the Council that expenses of our official representatives to the AMA meetings are a proper charge against the funds of the Association and we should raise sufficient money from dues to cover this important item. The delegate and alternate thought it would be best for both of them to go to the June AMA meeting, with Mrs. Bennett to assist them. They hoped that one person would be able to cover the interim session. Mrs. Bennett had drawn up a tentative budget for next year on that basis, which was discussed.

United Air Lines has suggested that the doctors who expect to go to the AMA meeting this June in San Francisco should book reservations for themselves and their families through Mrs. Bennett. If arrangements can be made for them to fly in groups, the Medical Association can earn one free passage for each ten full fares on one plane. In this way the Medical Association might lighten the burden on its budget by getting free trips for one or more of its representatives. United Air Lines would write to all the doctors and ask them to book through Mrs. Bennett so that an "American Medical Association Special" plane or other groups might be arranged to suit the convenience of the doctors. The Council authorized Mrs. Bennett to proceed with this plan. If the doctors are encouraged to make their reservations early, it will help us in making up next year's budget.

The present financial outlook of the Association made it seem likely to the Council that it would be necessary to ask for an increase of $5 in Territorial dues for the coming year in order to cover the delegates' expenses.

I. L. TILDEN, M.D.
Secretary

NOTES AND NEWS

PERSONALS

Dr. Randall Atsushi Nishijima has opened his office for the practice of general surgery in the Victoria Medical Arts Bldg., Honolulu. Dr. Nishijima is a native of Honolulu and a brother of **Dr. Satoru Nishijima,** D.D.S., and **Dr. Theodore Takeshi Nishijima,** anesthesiologist of the Kuakini Hospital. He received his preliminary education at the Washington University, St. Louis, and his M.D. from the Jefferson Medical College, Philadelphia, Pa., in 1941. His interneship was spent at the Easton Hospital, Easton, Pa., and he served two years in a surgical residency there. He then spent 14 months as a Fellow in Surgery at the Lahey Clinic, Boston, and one year at the Miami Valley Hospital, Dayton, Ohio, as an assistant resident in surgery. The last two years of his surgical training were as chief resident at the Albany Hospital, Albany, New York. Dr. Nishijima has completed the requirements for the American Board of Surgery and has passed Part I of their examinations.

Two local physicians, **Dr. Alexander E. Lee** and **Dr. Richard W. You,** have announced their association in the practice of general medicine and surgery and are located in the new Gaspar Medical Bldg., corner of Emma and Vineyard Streets. Dr. You has been in practice in Honolulu for several years and Dr. Lee has recently completed three and one-half years as chief resident physician at the St. Francis Hospital, Honolulu. Dr. Lee was born in Honolulu, received his preliminary education here before entering the Universty of Southern California and later the Universty of Kansas from which he was graduated in medicine. Following this he interned at the St. Francis Hospital, New York City, and also served an 18 months' residency there. Dr. You is a graduate of the Creighton Medical School in Omaha and interned at the Queen's Hospital following which he served two years in the U. S. Army. He later served a one year residency at the St. Francis Hospital and has been associated with Dr. Fred Lam in general practice prior to opening his new office.

Dr. William H. Wynn has announced the removal of his office from Union Street, Honolulu, to his new location at Room 211, King Kalakaua Bldg. Dr. Wynn's practice includes general medicine, surgery and obstetrics.

Dr. Grover H. Batten, of Honolulu, has begun a residency at the Memorial Hospital for Cancer and Allied Diseases, New York City. He plans to spend at least one year in this work before returning to Honolulu.

The Children's Hospital announces the addition of **Dr. Masato Hasegawa** as an assistant resident in pediatrics. Dr. Hasegawa was born in Wahiawa and was educated at the University of California and Wayne University Medical School, where he received his M.D. degree, in 1945. He served in the Infantry for one year during the war. His interneship was spent at the Detroit Receiving Hospital, following which he served as a captain in the Medical Corps, U. S. Army, from 1946 to 1948. During 1948 to 1949 he served as a junior assistant resident in pediatrics at the Boston Children's Hospital, Boston, Massachusetts.

The Queen's Hospital announces the completion of several interneships: **Dr. Ralph Cappola** has returned to Patterson, New Jersey, for further training and **Dr. William K. Graves** has completed his interneship and entered the army for further training.

Dr. Robert D. Millard, of Honolulu, has returned from a prolonged mainland tour, during which time he visited a number of medical institutions as well as visiting his former home in Wisconsin. He attended several medical conventions in the East.

Dr. Harry L. Arnold, Jr., was elected to the Board of Directors of the American Academy of Dermatology and Syphilology at the December meeting.

A paper on the complications of subdural hematoma was presented by **Dr. Ralph B. Cloward** at a meeting of the West Coast Neurological and Neurosurgical Societies, held in Pebble Beach, California, in February. After the meeting, Dr. Cloward learned that he had been unanimously elected a corresponding member of the San Francisco Neurological Society.

Dr. H. I. Biegeleisen, a native of New York City, will engage in the practice of sclerotherapy (injection treatment with sclerosing solutions) in Honolulu.

Dr. Biegeleisen is a graduate of Long Island College Hospital, 1927. His interneships were at the York Hospital, York, Pennsylvania, and Kingston Avenue Hospital, Brooklyn. Following five years of general practice, he went to the University of Vienna in 1933 to take a postgraduate course in plastic surgery. He has practiced sclerotherapy as a specialty in New York City for the past 17 years. Dr. Biegeleisen is chief of the clinic for sclerotherapy at the Stuyvesant Polyclinic and for 10 years was chief of the varicose vein clinic at Beth David Hospital, New York City. He is instructor in sclerotherapy at the Stuyvesant Polyclinic and has published numerous original articles and two books on his specialty.

Maui

Dr. Joseph E. Molloy is a new member of our Society.

A daughter was born to **Dr. and Mrs. William Toney,** of Lahaina, on January 20, 1950.

Dr. Edward B. Underwood and **Dr. Edmund Tompkins** returned from their mainland vacation.

A daughter, Barbara, was born to **Dr. and Mrs. Seiya Ohata** of Paia on February 7, 1950.

A son, Thomas Richard, was born to **Dr. & Mrs. Robert F. Cole** of Paia on February 26, 1950.

A daughter, Faye Ryuko, was born to **Dr. and Mrs. Lester Kashiwa** of Wailuku on February 18, 1950.

Hawaii

Dr. John Jenkin is the newly elected president of the Hilo Kiwanis Club. M.D.'s are conspicuously prominent in organization activities with **Dr. Walter Loo** acting president of the Hilo Lions Club and **Dr. Leo Bernstein** the president of the Rotary Club.

Dr. Ernest B. Cunningham, Medical Corps, USNR, has been promoted to the rank of Lieutenant in the Naval Reserve.

Dr. S. Kasamoto has been appointed County Physician for the County of Hawaii as of January 1, 1950. **Dr. Robert M. Miyamoto** has been appointed his assistant.

Dr. Clyde L. Phillips has returned to his practice after spending almost the entire month of December resting in Kona. During his absence **Dr. Pete Okumoto** attended his patients.

In impressive ceremonies at the Lanai on the 26th of January **Dr. Francis Wong** received an award as the Man Contributing Most to Sports in Hilo during the year 1949.

Dr. K. Yoshimura, presently of Kona, is planning to leave Kona and open a practice in Honolulu.

NEWS

Honolulu Surgical Society

Dr. J. Warren White addressed the Honolulu Surgical Society in January on "The Short Leg—Its Treatment." The discussion on this paper was opened by **Drs. S. F. Stewart** and **Richard Dodge.**

Honolulu Obstetrical and Gynecological Society

Two very interesting and instructive papers were delivered at the January meeting by **Dr. Joseph L. Baer,** Emeritus Professor of Obstetrics and Gynecology of Rush Medical College, Chicago, Illinois, who spoke on "Surgical Conditions Complicated by Pregnancy." **Dr. N. Sprout Heaney,** also Emeritus Professor of Obstetrics and Gynecology of Rush Medical College, spoke on "When Does a Gynecological Case Need to be Operated Upon?" Following these papers a most instructive question and answer period was held with questions submitted by the audience.

At the December meeting of this society **Dr. Lyle G. Philips** gave a report on the meeting of the Central Association of Obstetricians and Gynecologists which he recently attended.

The Hawaii Dietetic Association

The Hawaii Dietetic Association has a membership of fifty-two dietitians. The group is affiliated with the American Dietetic Association with headquarters in Chicago. Dietitians are employed in hospitals, schools, cafeterias, teaching and vocational work and in school lunch programs. The officers for the year are:

President—**Miss Lorene Kulas,** Chief Dietitian, St. Francis Hospital

Vice President—**Miss Mary Lum,** Chief Dietitian, Kapiolani Hospital

Secretary—**Miss Ruth Toreson,** Director of Dietetics, The Queen's Hospital

Treasurer—**Mrs. Elsie Boatman,** Cafeteria Director, The University of Hawaii

Each member selects the section in which she wishes to participate during the year. The sections and respective chairmen are:

Food Administration—**Miss Jeanette Owens,** The University Cafeteria

Community Nutrition—**Mrs. Helen McGill,** Dept. of Home Economics, Department of Public Instruction

Diet Therapy—**Mrs. Virginia Cooksey,** Wahiawa

Professional Education—**Miss Juliet Leong,** St. Francis Hospital

Miss Juliet Leong is the Personal Relations and Publicity Chairman. Meetings are held monthly except during July and August. Each section is responsible for the program for two meetings.

Mrs. Dorothy Asper, who has been Chief Dietitian at Kapiolani for the past 12 years, has resigned from this position. She was succeeded by **Miss Mary Lum,** who was the Administrative Dietitian at Leahi Hospital.

Miss Nobuko Shiraki has recently been employed as Assistant Dietitian at Leahi Hospital.

Miss Edna Kaneshige, Dietitian in charge, YWCA Cafeteria, resigned to be married. **Mrs. Asper** will succeed her.

Miss Nathalie Namba recently completed the Post Graduate Course for Dietitians at Harper Hospital, Detroit, Michigan. She has resumed her duties as Assistant Dietitian at St. Francis Hospital.

Physicians Art Association

The American Physicians Art Association will have its twelfth art exhibition in conjunction with the American Medical Association Convention at San Francisco Auditorium June 26 to 30, 1950.

Any physician who follows the hobby of fine or applied arts can exhibit at this convention by becoming a member of the A.P.A.A. and applying for entry blanks and shipping labels of the secretary, F. H. Redewill, M.D., 526 Flood Bldg., San Francisco 2, Calif.

Over one hundred trophies will be awarded to advanced physician artists (A) as well as to beginners (B who have done art work less than two years), the main purpose of the Association being to encourage all physicians to take up art in some form as an avocation.

For those physicians who have never done any painting, photography, sculpture, wood or metal craft, etc., they can, without obligation, learn how to become creditable amateurs by writing to the secretary.

The American Physicians Art Association with its 4000 members is recognized as having the finest amateur art shows in the world during the A.M.A. conventions and the Association is desirous of having every physician who does art work to participate.

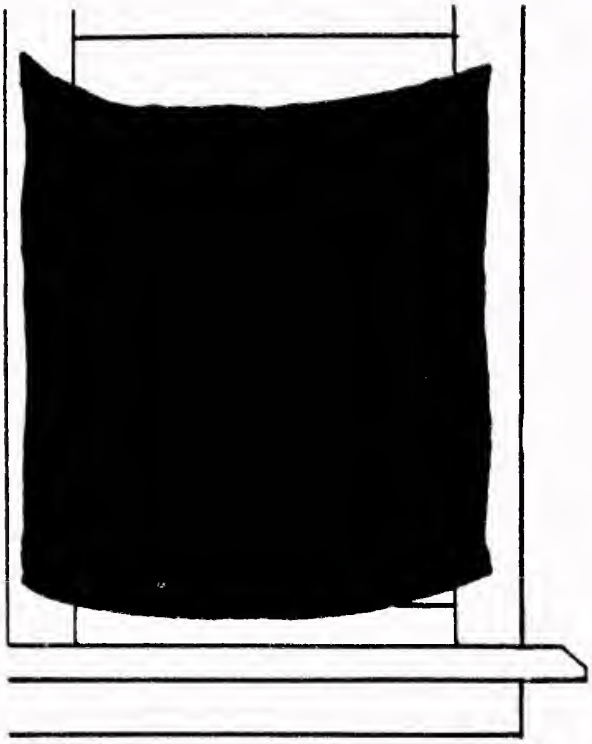
Congress on Chest Diseases

The First International Congress on Diseases of the Chest will be held at the Carlo Forlanini Institute, Rome, Italy, September 17-20, 1950, under the auspices of the Council on International Affairs of the American College of Chest Physicians and the Carlo Forlanini Institute, with the patronage of the High Commissioner of Hygiene and Health, Italy, in collaboration with the National Institute of Health and the Italian Federation Against Tuberculosis.

Physicians who are interested in attending the Congress should communicate at once with Dr. Chevalier L. Jackson, Chairman of the Council on International Affairs, American College of Chest Physicians, 500 North Dearborn Street, Chicago 10, Illinois, U.S.A., or with Professor A. Omodei Zorini, Carlo Forlanini Institute, Rome, Italy.

Dutch Archives of Surgery

The Dutch Archives of Surgery, a new publication mentioned in an editorial in the last July-August HAWAII MEDICAL JOURNAL, has now reduced its subscription price from $8.50 to $6.00 per year, due to devaluation.



Blackout!

Today countless professional men abroad are working in a scientific and intellectual blackout. They have little knowledge of current research, new techniques and theories. They are still handicapped by the destruction and isolation of war.

> . . . The University of Louvain Library, famous for its scientific collections, was completely burned. 900,000 volumes were lost.

The publishing being done abroad is still far short of the demand.

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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NURSING SERVICE NEEDS IN THE TERRITORY OF HAWAII*

SISTER MARY ALBERT, R.N.

At the last annual meeting of the Territorial Nurses' Association, many problems of nursing service and nursing education were presented in a series of challenging programs. Many of us at that time regretted that more hospital administrators were not present. There was much they could have gained and much they could have contributed to many of the discussions.

One subject which commanded considerable attention was that of "Nursing Service Needs in the Territory of Hawaii." Another topic closely allied to the first was: "Planning Nursing Education to Meet Changing Needs in Nursing Service." Miss Mary Cheek, Director of Nursing at The Queen's Hospital, will cover the second topic. I shall try to give a brief resume of the first.

According to the latest professional registered nurse inventory released by the American Nurses' Association there are, in round numbers, approximately 500,000 professional registered nurses in America today. More than 200,000 of this number are inactive. Of the approximately 300,000 in active service, nearly 142,000 are in hospitals and other institutions; and an additional 12,000 are either in schools of nursing or on the staff of both a hospital and a school of nursing. About 65,000 registered nurses do private duty nursing; 26,000 office nursing; 13,000 industrial nursing, and 29,000 public health nursing. The remainder are in unclassified positions.

* Presented at the Tenth Annual Meeting of the Hospital Association of Hawaii, December 9, 1949.



Sister Mary Albert is Director of Nursing Service and of the School of Nursing at St. Francis Hospital, Honolulu. A graduate of the St. Joseph's Hospital School of Nursing, Syracuse, New York, she took courses in education at Western Reserve University, and the University of Hawaii. She received a baccalaureate degree from the University of Dayton and a master's degree in Nursing Education from the Catholic University of America. Before she came to St. Francis Hospital in September 1940, she held positions as surgical supervisor and night supervisor in New York State. She was born in Cleveland, Ohio, and is a member of the Sisters of the Third Order of St. Francis of Syracuse, New York.

Figures obtained from the Board for Licensing of Nurses, Territory of Hawaii, show that there were 1,358 professional nurses registered in the Territory in June 1949. Approximately 1,000 of these were actively engaged in nursing. A little over half of the active nurses worked in hospitals and other institutions.

These figures show a decided similarity when over-all mainland and Territorial averages are compared in the areas of (1) ratio of professional nurses to population and (2) the proportion of active nurses engaged in institutional nursing. However, it is well known that there is great variety in various states regarding the ratio of professional nurses to population. Our ratio compares rather favorably with desirable standards. The desirable goal according to the U. S. Public Health Service is 1 nurse to 280 population; we have one graduate to 413 population.

Last summer the Committee on Nursing Needs of the Oahu Health Council made a limited survey

which provided some interesting data. Questionnaires were sent out to all Territorial hospitals and the Department of Health, and 70 per cent of the hospitals and the Department of Health responded. From this survey, it was estimated that island patients were receiving 3.6 hours of nursing care per patient in each twenty-four hours. This over-all average is adequate according to present acceptable standards. About 70 per cent of this care was given by professional nurses and 30 per cent by non-professional personnel. However, the picture in individual hospitals was not as satisfactory as the over-all average. An apparently excessive supply of nursing service in some hospitals compensated for the apparently wholly inadequate nursing staff in others.

Two other matters for concern brought to light by this survey are: (1) Only about 35 per cent of the professional nurses employed in the Islands are graduates of local schools; 65 per cent of our nurses are from the mainland or other countries. (2) There is a high degree of instability in the employment of professional nurses in the Territory. The turnover rate for the year surveyed was 68 per cent. This seems to be a very high rate; mainland figures, however, are not available and we have no basis for comparison. It would be interesting to make a comparative study of nursing turnover with replacement rates in industry and other forms of employment in the Islands.

The instability of our professional nursing staff seems quite closely related to our dependence on a mainland supply. The reason given for 51 per cent of the resignations was "return to the mainland." The practical nurse turnover was only 43 per cent; most practical nurses are locally trained.

It is also questionable whether we are justified in recruiting such a large number of graduate nurses from the mainland when there is such an acute shortage in many sections of the country. The number of local graduates available, however, should increase steadily. The average number of students graduating yearly from local schools of nursing between 1944 and 1948 was 62; there were 175 professional nurses graduated in 1949. Since the institution of the practical nurse program under the auspices of the Department of Public Instruction about two years ago, about 90 practical nurses have been graduated. It is estimated that hospitals will need approximately 120 practical nurse replacements each year under existing circumstances. The practical nurse school feels that it can increase its yearly enrollment to 85 students in addition to part-time students who attend night classes. While there are sufficient qualified women applicants for the practical nurse training program, the number of male trainees is inadequate.

The survey also pointed out a deficit of about 20 per cent in the supply of public health nurses in the Territory. This estimate is based upon a desirable standard of 1 public health nurse to 5,000 population but it does not cover a generalized public health program including the bedside care of the sick in their homes. Hawaii does not seem to have an adequate program in the latter respect although the need for such a program in Hawaii has not been clearly demonstrated.

Other nursing needs revealed by the survey were in the areas of well prepared supervisory and instructional personnel, and in advanced educational programs available locally that would prepare Island graduates to become instructors and experts in clinical specialties. In only one school of nursing did the local graduates comprise as much as 25 per cent of the senior faculty. The average tenure of office for senior faculty members in the three shools was less than two years.

So much has been written about the shortage of nurses on a national basis within the last several years. Many observations have been made regarding even more serious shortages in the future.

It was estimated by the Women's Bureau of the U. S. Department of Labor that a minimum of 550,000 professional nurses would be needed by 1960. This would necessitate the graduation of at least 45,000 nurses per year. Since this goal seems impossible to attain, more recent students of the problem have advocated the delegation of many of the duties of the professional nurse to the practical nurse. Assuming a ratio of two practical nurses to one professional nurse, Ginzberg and others advocate a goal of approximately 200,000 professional nurses by 1960.

The Ginzberg Report lists the following as major reasons for the apparent shortage of professional nurses:

1. The traditional tendency to minimize economic incentives in rewarding nurses.
2. The increasing demand by the American public for medical and health care, including nursing care.
3. The inadequacy of adjustments in nurses' pay and working hours to meet competitive conditions.
4. Poor utilization of professional personnel in hospitals.
5. High attrition rates in schools of nursing.

It is interesting to note in another part of the

book that a recent study shows that among 29 women's occupations, the registered nurse ranks second to the doctor as "the most looked up to." The Ginzberg report also revealed that while the school of nursing withdrawal rates for the past decade were around 30 per cent, the pre-war withdrawal rate for women attending college was 40-45 per cent. Comparable pre-war rates for professional schools in the United States ranged from less than 20 per cent in medicine to 58 per cent in home economics.

The fourth point mentioned in the Ginzberg report is of great practical importance to all hospital administrators. Is there really a serious shortage of professional workers or would we have a sufficient supply if we utilized their services more wisely?

It is true that the American public is demanding more nursing care. It is also very true that advances in medical science have added immeasurably to the variety of duties required of today's nurses. Early ambulation, new methods in obstetrics, new operative procedures, new medications and methods of diagnosis may have shortened the individual patient's hospital stay, but they do not seem to have decreased the number of nursing hours needed per patient during hospitalization. In many cases they have increased the nursing load. The greater proportion of aged individuals in society today has also increased the need for nursing care.

Professional nurses can no longer be hospital housekeepers, hostesses, messengers and clerks in addition to rendering complete nursing care to patients. It is an economic liability to have a head nurse continue to devote 30 per cent of her time to these tasks. In too many hospitals, there is all too little consideration paid to efforts necessary to conserve the time and energy of professional nurses. It is gratifying, however, to find that an increasing number of hospital administrators and architects are inviting nurses to make suggestions for new construction and equipment.

Professional nurses today are the liaison between all types of professional workers. They are the eyes and ears of the physician during his absence; they perform many of the procedures formerly considered to be in the domain of medical care. They must be prepared to meet the emotional, mental, psychological, spiritual, cultural and social needs of the patient and his family as well as their physical needs. They must be able to teach individuals how to get well and how to stay well; and lastly they must be able to participate intelligently in organized programs for disease prevention and health maintenance throughout the community. No longer is the hospital an isolated unit for the care of the sick. It is the health center for the community which supports it. Likewise, no longer is the nurse an assistant with only a modicum of intelligence who follows orders blindly and thinks only of the immediate needs of the patient. Personally, I don't believe that a good nurse ever had these limitations.

How are we going to use the professional nurse most wisely in the future? By allowing her to assume her rightful role on the health team. On the nursing team itself, she must be the leader, the teacher, the administrator and the supervisor in addition to giving expert nursing care to patients who need it.

Whenever necessary, she should have practical nurses, aides, clerks and maids to help her. The practical nurse, who has completed a program of approximately ten months' duration in practical nursing under educational auspices, should give care to the less acutely ill patients under the supervision of the professional nurse.

Aides trained on the job to perform a limited number of the simpler personal services for patients have been found very valuable in many hospitals on the mainland. Clerks who are paid a much lower salary than a graduate nurse can relieve a professional nurse of many time-consuming tasks.

All hospital personnel should receive the benefit of a well organized in-service educational program. This pays dividends in employees morale, departmental efficiency and patient satisfaction.

There have been numerous studies in nursing within the last decade but much remains to be done. In the realm of nursing service, the following problems might be selected as being of major importance:

1. *The need to develop scientific standards regarding:*

a. *The nursing care hours needed per patient each twenty-four hours.* Standards have been devised but they have been based on current practices rather than on an experimental study to establish scientific standards.

b. *The desirable ratio of practical nurses to professional nurses.* There is much difference of opinion on this subject. Research is being carried on in this field but I know of no published standards scientifically arrived at as yet. The American Medical Association in its committee report on Nursing Problems recommended a nursing team consisting of 15 per cent professional nurses, 25 per cent registered nurses and 60 per cent practical nurses. As was stated before, the Ginzberg report recommends 30-35 per cent professional nurses and 65-

70 per cent practical nurses. Perhaps the ratio of professional nurses to practical nurses may vary greatly in various kinds of hospitals and even within the various departments within the same hospital. This whole subject needs intensive study and experimentation. The extent to which the practical nurse should be used in hospitals must depend upon the task to be done and the opportunity for supervision. There must always be a sharp demarcation between the duties of professional and practical nurses.

2. *The need for better programs in advanced nursing education.*

We need more clinical programs that are truly on an advanced educational level in order that we may prepare badly needed clinical experts who are qualified to give the best type of nursing care in addition to being prepared for teaching and supervision. We shall probably always have difficulty in having a sufficient number of well prepared personnel in nursing since the profession is made up predominantly of women. Previous experience has shown that many well qualified nurses leave the profession for marriage and motherhood. This is as it should be. There are many sociological implications involved when children are left to the care of strangers.

3. *The need for uniform personnel policies in hospitals.* Minimum and maximum salaries, the increment schedule, sick leave and vacation allowance, hours of work, etc., should be clearly defined in writing. The increment policy should be based on a sound program of merit rating. Many Island hospitals seem to have excellent personnel policies but I believe that there is a need for a greater differentiation between salaries paid different types of workers.

4. *The problem of providing greater economic security for employees of voluntary hospitals.* It is hoped that some method within the means of the hospital budget may be devised which will secure social security benefits for nurses and other employees. If the plan suggested by the American Hospital Association has not been investigated by the Territorial Hospital Association, I believe that this should be an early project.

In conclusion, I should like to say that in attending many of the meetings of the Honolulu and Territorial Hospital Associations over a period of ten years and in working quite closely with members of these organizations, I have found that Island hospital administrators by and large are sincerely interested in the welfare of nurses. They have demonstrated a spirit of fairness and generosity in dealing with problems that have arisen. However, I believe that informal discussions between administrators and their nursing staff could result in even better relationships. Nurses understand the current financial difficulties of hospitals and are anxious to cooperate in any way possible. By working together to insure the best type of care possible for the patient at a price he can afford, hospital administrators and nurses will carry on the excellent record of voluntary hospitals in the past.

TRENDS IN NURSING EDUCATION*

MARY V. CHEEK, R.N.

Sister Mary Albert has given you a clear picture of the nursing service situation today from both a nation-wide and a local viewpoint. These facts may serve as a point of departure in discussing the subject of Nursing Education. All nurses and all institutions conducting schools of nursing really have but one goal—to provide and maintain nursing services to meet the needs of the people. The time has long passed when the patient (the public) is satisfied with the comfort he can derive from kissing the shadow of the "lady with the lamp" as she passes between the rows of beds and speaks kind words or places a cool hand upon a fevered brow.

It is also obsolete to appeal to young women to enter nursing to lead lives of self-sacrificing service for which they are promised the undying gratitude of those whom they serve, but little else. I still maintain that a large majority of young women enter nursing and remain there because of a strong service-to-mankind motive, but plain common sense requires that they realize that they must eat and that they weigh other factors as well—economic, cultural and social.

Neither the Brown report, which has created such an upheaval among many organizations concerned with nursing nor the Ginzberg report which has also made a great impression, is the first study to point up the need for drastic changes in nursing education. More than 20 years ago a book called "Nurses, Patients and Pocketbooks" brought out clearly many of the existing weaknesses in the programs. Some of these weaknesses have been greatly strengthened—in some places—but many of the same ones still exist. In 1934, another important study was made: "An Activity Analysis of Nursing." This showed that much of the work being done by nurses was not nursing at all but consisted of housekeeping duties, clerical work, errand running and everything else required in running a hospital. Nursing education was not really education but an apprenticeship training

* Presented at the Tenth Annual Meeting of the Hospital Association of Hawaii, December 9, 1949.

whereby hospitals obtained cheap labor and granted a diploma at the end of three years.

However, the first two mentioned reports are the most recent, and the most widely read, and have made the most clearly defined recommendations. The Brown report is based on a comprehensive study covering a period of about two years. The National Nursing Council initiated the study by requesting financial support from the Carnegie Corporation of New York for an examination of the question "Who should organize, administer and finance professional schools of nursing?" Dr. Esther Lucille Brown, Director of Studies of the Russel Sage Foundation was commissioned to do the study and was given a leave of absence to carry it out. The first and most important decision agreed upon was the decision to view nursing service and nursing education in terms of what is best for society—not what is best for the nursing profession. I think this is a significant point to be kept in mind when we consider this subject. Numerous workshops have been held throughout the country for the purpose of studying the recommendations in this report. A national committee was formed called the Committee for Implementing the Brown Report. There is a significant point in connection with this committee. It soon changed its name to "The National Committee for the Improvement of Nursing Services." The outstanding recommendations of the Brown Report are these:

1. A differentiation of nursing services according to function.

2. The fusion of all persons concerned with the care of the ill into coordinated teams in which each person, according to background, training and experience, performs certain functions essential to total nursing service.

Relative to this recommendation, Dr. Brown states, "Unless attention can be centered squarely upon the importance of the contribution that each person brings to the health services, be that person wardmaid or director of nursing service, efforts to create and stabilize a differentiated personnel will be of small avail. And, unless every contributing person can be conceived of and treated as a member of a unified team, whose sole collective function is the cure of sickness and the preservation of health, we shall be little better off than at present."

3. The preparation of the professional nurse belongs squarely within the institution of higher learning.

4. The establishment of a national accreditation service which will examine all schools at regular intervals and publish lists of those schools which meet the requirements set up.



Mary Vida Cheek of Durham, North Carolina, is a graduate of North Carolina Baptist Hospital School of Nursing, Winston-Salem, N. C. She received her baccalaureate degree in Nursing Education at the University of Virginia and her master's degree from the University of Washington. She is at the present time Director of Nursing at the Queen's Hospital, Honolulu, and before coming to the Islands was Director of Nursing at Memorial Hospital, South Bend, Indiana.

There are many other recommendations concerned with the organization, sound financial backing, and administration of schools concerned with the education of all nursing personnel, whether they are practical nurses, graduate nurses or professional nurses.

The Ginzberg report, also published in 1948, is called "A Program for the Nursing Profession." This is the work of a committee which was set up in 1947. Many nursing leaders were becoming increasingly aware that they were faced with a dilemma—that many problems with which they had to grapple were only partly professional and not subject to assessment and solution by nurses alone. The members of this committee came from the fields of medicine, public health, hospital administration, government, education, economics and the laity. This group also had much to say about nursing education. To begin with, "A profession is as good or as bad as the educational base on which it rests."

The Ginzberg report also offers a number of criticisms of the prevailing system of nursing education. It points out the vast difference between a curriculum geared to the hospital needs and one geared to educational objectives.

The course is too concentrated in the first year during which time the student has to absorb a mass of varied material. The school is entirely dependent upon the hospital for its resources. The primary objective of every hospital is the effective treatment of the sick and it must devote its major resources to this end. This is as it should be. Therefore, conflicts, when they arise, are necessarily resolved in favor of the hospital's therapeutic function. The training of the professional nurse must include her responsibility for planning the total nursing care—preparing and supervising the work of the practical nurse.

To quote from this report: "Although we are committed to the eventual disappearance of the registered nurse as a specific category and to the

simultaneous expansion of the practical and professional nurse groups, we consider it important to ease the transition by enabling the registered nurse to prepare herself for full professional status. . . . Only through systematic effort can the old be developed and improved and the new discovered and applied."

Another quote: "Schools for professional nursing must be removed from the jurisdiction of hospitals and affiliated with universities or colleges."

It has also been recommended by some groups that nursing education be given federal aid, or actually be subsidized with federal funds. There is already a bill before Congress promoting this measure. Others have suggested state subsidy. One of the sub-committees of the Territorial Holdover Committee has been commissioned to study the advisability of the Territory of Hawaii subsidizing nursing education here.

I have no intention of setting myself up as an authority by attempting to evaluate these important reports, but I would like to point out a few of the facts which seem to stand out clearly if nursing education is going to fulfill its obligations to meet community needs for nursing services.

First, there is the need for amalgamation of activities of all groups concerned with the matter. Selfish aims must be deleted. Fears that one group, be it doctors, hospital administrators, professional nurses, boards of directors or any other, may usurp the rightful position of authority or prestige of another group must be abolished. The problem must be viewed as a whole. Broad objectives must be adopted.

Next is the necessity for facing realities along several lines:

1. In the recruitment of students, it must be realized that we are competing with many other choices of a career and we must put ourselves in a position to offer the student who chooses nursing the best education possible for nursing and for living.

2. Next, in solving the problem of nursing shortage. Regardless of whether the use of practical nurses and other auxiliary workers is what we want, they absolutely must be used, so it is up to us to see to it that they are properly trained and used so that the patient will get the best possible care.

3. The educational program for nursing must be such that it will prepare women to fill the role prescribed for them today and *tomorrow*.

The Brown report as well as many of the activities of the National League of Nursing Education have been severely criticized. In some states large groups of nurses, doctors and hospital people have come out in open rebellion toward many of the proposals made. It is said that we are educating the nurses away from the bedside; that they are being trained to be assistant doctors rather than nurses; and that they consider themselves too good to do bedside nursing.

I will admit that there is a possibility of such a development if schools of nursing are treated as the unwanted children of divorced parents rather than the nurtured products of congenial homes. But if these conditions prevail, then nursing education will have failed. Let me point out to you some of the things a professional nurse must know and be today.

1. She must be skilled in giving bedside care, and if the patient's condition warrants it, she must actually give every single detail of that care. In connection with this, I would like to call your attention to an experience I had just this week. I picked up several charts of patients who had been hospitalized less than a week. The first two I looked at had six pages of doctor's orders. How do you think this compares with the number of doctor's orders left for patients as recently as ten years ago?

2. She must know the responsibilities, the abilities, and the limitations of each member of the team with which she works.

3. She must know the total picture of the nursing needs of each patient assigned to her.

4. She must know the basic principles of teaching, supervision and administration in order to teach and direct the members of her team.

5. She must know how to make members feel they belong and are necessary to the welfare of the patient.

All of this must be included in her education. By training and experience she must learn how to exercise judgment. At this point I would like to quote briefly from "An Activity Analysis of Nursing" published fifteen years ago.

> There are occasions when even the simplest nursing procedure may carry with it an element of risk to the patient—there is need for precaution in performing such elemental duties as bedmaking, cleansing the mouth, etc. . . . whether bedside care should be regarded as a routine activity or as a skilled professional service depends then, not upon the nature of the activity itself, but upon the condition of the patient. To observe and interpret is perhaps the most outstanding characteristic of the professional nurse. Expert observation requires discriminating judgment based on scientific knowledge plus experience.

And I would like to add one little personal opinion here. Anytime any nurse arrives at the point where she considers herself too highly educated or too good to empty a bedpan or perform any other nursing function, it is high time that she got out of nursing.

Two important steps have already been taken which will help nursing education to pull itself

up by its bootstraps. A National Nursing Accreditation Service has been established. This service is carried out along much the same lines as the accrediting of schools of medicine and other professional schools. A list of schools which have already been examined by this service was published in the October *American Journal of Nursing*. Accreditation does not have as its objective the elimination of schools, but their improvement. An Interim Classification of Schools has also been made. This is based on a survey in which 1155 schools of nursing participated. Schools were classified into 3 groups. Group I included the top 25 per cent, Group II the middle 50 per cent, and Group III the lower 25 per cent. Groups I and II were published in the November 1949 AJN together with an article describing how the survey was made and a composite of the top 25 per cent schools showing the characteristics of those schools. It is proposed that another classification be made in two years. Hawaii is fortunate in having two schools of nursing listed in Group I, the top 25 per cent. Many states throughout the mainland have none.

Summary and Conclusions

There is dire need for research by well prepared people. There is need for serious, intelligent, objective and unselfish consideration by all groups concerned, of all the factors involved. There must be singleness of purpose. That is, the aim of nursing education should be to establish and maintain the best educational program possible for the purpose of producing the best nurses possible, for the purpose of rendering the best nursing care possible, for the purpose of aiding other members of the health team to meet to the highest degree possible the all around needs of John Q. Public.

No one expects the changes recommended to be put into effect immediately. Indeed, it would be impossible. It is a long range program, made with vision for the future and if it is carried out it will have to go through a transition period of step by step progress. I would like to conclude these remarks with one final quotation which says what I want to say better than I can say it for myself.

"Some radical changes are being proposed. To act wisely we need every viewpoint. The perspective of those who study our situation from the bedside is needed. So is the closer view of those at the bedside. The supervisor, the educator, the staff nurse and the boss must pool their views to find the common denominator. No single group in our midst has a corner on ideals and common sense, nor is any group lacking in them. It isn't intelligent to insist that everything in the past was wise and good, for it isn't true. Nor is it intelligent to insist that everything proposed for the future is wise and good. We don't know. We will be on the right track when more of us have a wider understanding of the profession's purposes, problems and place in the world. The movement of the mob is that of its slowest member, says Emerson. Thus, those in the vanguard must be bold to offset the slowpokes at the rear. The middlers, I believe, will set the final pace."

FROM HEADQUARTERS IN HONOLULU

This is perhaps the best way to reach all our nurses and let them know what is going on in the home office.

I have just returned from a very interesting visit to Hawaii and Maui and learned a lot about the hospitals and nurses there. I really enjoyed meeting all the nurses and hope to see more of all of you in the future. I shall go to Kauai in March and see all of you there.

Our Counseling and Placement Service is now becoming a part of the national service of the American Nurses' Association. Through this a referral of applicants can be made on a national basis. This is a valuable service to all nurses and is available to all. This is one thing your association can do for you.

The Economic Security Program Committee has been appointed and is beginning to get under way on our program for the year. It will be a long, hard task but well worth it in the end. All we need now is the hearty cooperation and assistance of each and every nurse. Here is your chance to remedy some of the things about which you have been complaining for many years. Won't you please help us to help you? Encourage all nurses to belong to their association so that they may reap in the benefits we anticipate from our program.

We can and will make our Nurses' Association here in the Territory a live and growing organization. Let's make 1950 a banner year for Hawaii.

Your Executive Secretary,
MABELCLAIRE NORMAN, R.N.

HONOLULU

New officers of the C&C of Honolulu Nurses' Association elected at the January meeting are:

RUTH IMAI, *Vice President*
VIRGINIA RAUTENBERG, *Secretary*
AGNES PETERSON and MILDRED ASATO, *Directors*

Other officers who will continue in office are:

MYRNA CAMPBELL, *President*
MARGARET WONG, *Second Vice President*
BERNADETTE YOSHINA, *Treasurer*
RAE KELLEHER, MICHIKO CHINNA, VIRGINIA AHRENDT and ETHEL HASS, *Directors*

The Private Duty Section officers for 1950 are:

MRS. LOUISE BYOUS, *Chairman*
MRS. ANNIE STEPHENS, *Vice Chairman*
MISS KATHLEEN KEATING, *Second Vice Chairman*
MISS MARGARET GILLILAND, *Secretary*

Uniforms For Korean Nurses

A project being sponsored by the C&C of Honolulu Nurses' Association is the collection of old, but useable, nurses' uniforms to be sent to Korean nurses. The outer Island Nurses' Associations are invited to join in on the project and can obtain more details by writing to the Nurses' Association office in Honolulu.

Kuakini Hospital News Notes

Mrs. Elizabeth H. Koenig, Director of Nursing at Kuakini Hospital, attended a convention at Teachers' College, Columbia University, in November, commemorating the Fiftieth Anniversary of the Nursing Department of Columbia University. The theme of the convention was "Nursing for Tomorrow." Mrs. Koenig was entertained by her classmates both at Columbia and St. Luke's Hospital.

Miss Ernestine Grams of Pasadena, California, has recently been appointed Educational Director of Kuakini Hospital. Miss Grams received her education at Huntington Memorial Hospital and the University of California and also studied in Europe.

Miss Yetta Ishiki, who received her Bachelor of Science in Nursing Education at St. Louis University, St. Louis, Missouri, has accepted a position as head nurse at Kuakini Hospital.

Mrs. Anneliese Chun was appointed clinical instructor at Kuakini Hospital recently.

MAUI NEWS

Miss Beverly Warner, employed at Kula Sanatorium, is leaving for a new position at the Henry Street Settlement in New York.

Miss Ionia Rickey has recently returned to Kula Sanatorium following surgery in Honolulu.

Miss Neva Harris resigned her position as supervising public health nurse on Maui and has returned to her home in Iowa. Miss Laura Wong, formerly assistant supervising nurse, has been promoted to the position vacated by Miss Harris.

Misses Fumiyo Suzuki and Hazel Kanemoto, employees of the Board of Health, vacationed in Honolulu recently.

Miss Faye Berry, for two and a half years an employee of the Paia and Puunene Hospitals, has returned to her home in Machias, Maine.

Miss Judy Sakamoto, a recent graduate of Queen's Hospital in Honolulu, is now employed at Puunene Hospital.

Mrs. Clara Hoffman, a graduate nurse living at Hamakuapoko, recently became the mother of a baby girl, her third. Mrs. Donald Hughes, formerly Mary Lawrence and employed at Puunene Hospital, became the mother of a baby boy, her first.

MARILYN ESTILL, *Reporter.*

BOOK REVIEWS ON NURSING SUBJECTS

Many readers of the BULLETIN probably do not realize that reviews of books on nursing appear in the HAWAII MEDICAL JOURNAL in the section *Book Reviews.* Publishers give complimentary copies of medical and nursing books to the HAWAII MEDICAL JOURNAL for book reviews. Books on nursing are then given to the Nurses' Association for the Library. As you will find, reviews on nursing subjects are prepared by nurses.

Each year new books on nursing or subjects of interest and value to nurses are purchased for the nurses' section of the Honolulu Medical Library. The selections are made by the Library Committee of the Nurses' Association, Territory of Hawaii, and purchased with money provided by the Margaret Jones Memorial Fund.

All books on nursing are not to be found in one place in the Library, as they are classified according to subject matter and placed on the shelves in that arrangement. However, books owned by the Nurses can be identified by the distinctive book plate of the Association.

Student nurses are constant and heavy users of the facilities of the Library. Make it a point to become acquainted with this attractive section of Mabel Smyth Building and meet Mrs. Hill and Miss Newhall, Librarians. They will be pleased to show you the Library and answer your questions.

BIENNIAL CONVENTION

" 'Nightingale Special' now leaving for San Francisco from Gate 3."

"OH, I wish I had planned to go! Goodbye! Aloha!"

How many of you are going to be left behind when the special plane leaves for the Biennial? The dates: May 8-12; the place: San Francisco. Though details of speakers, etc., are not known as yet, the theme of the convention is: Health—A Unifying World Influence; Nursing Accepts Its Role.

Here is your opportunity to be a part of some stimulating discussion and history making decisions as more and more nurses are rising to meet the ever increasing demands upon their profession. We should all be a part of this valuable work. It is an opportunity for you to see and hear some of your well known nurses and find out first hand what is going on in our profession.

Make hotel reservations now because two other conventions will be in San Francisco at that time. We'd like very much to have a plane full and thus make everyone know that we here in Hawaii are the active organization we really are.

Don't miss the biennial. Let's all go together.

Reservations can be made through Mrs. Miyoko Azuma, Ph. 86481 or address: Lanakila Health Center.



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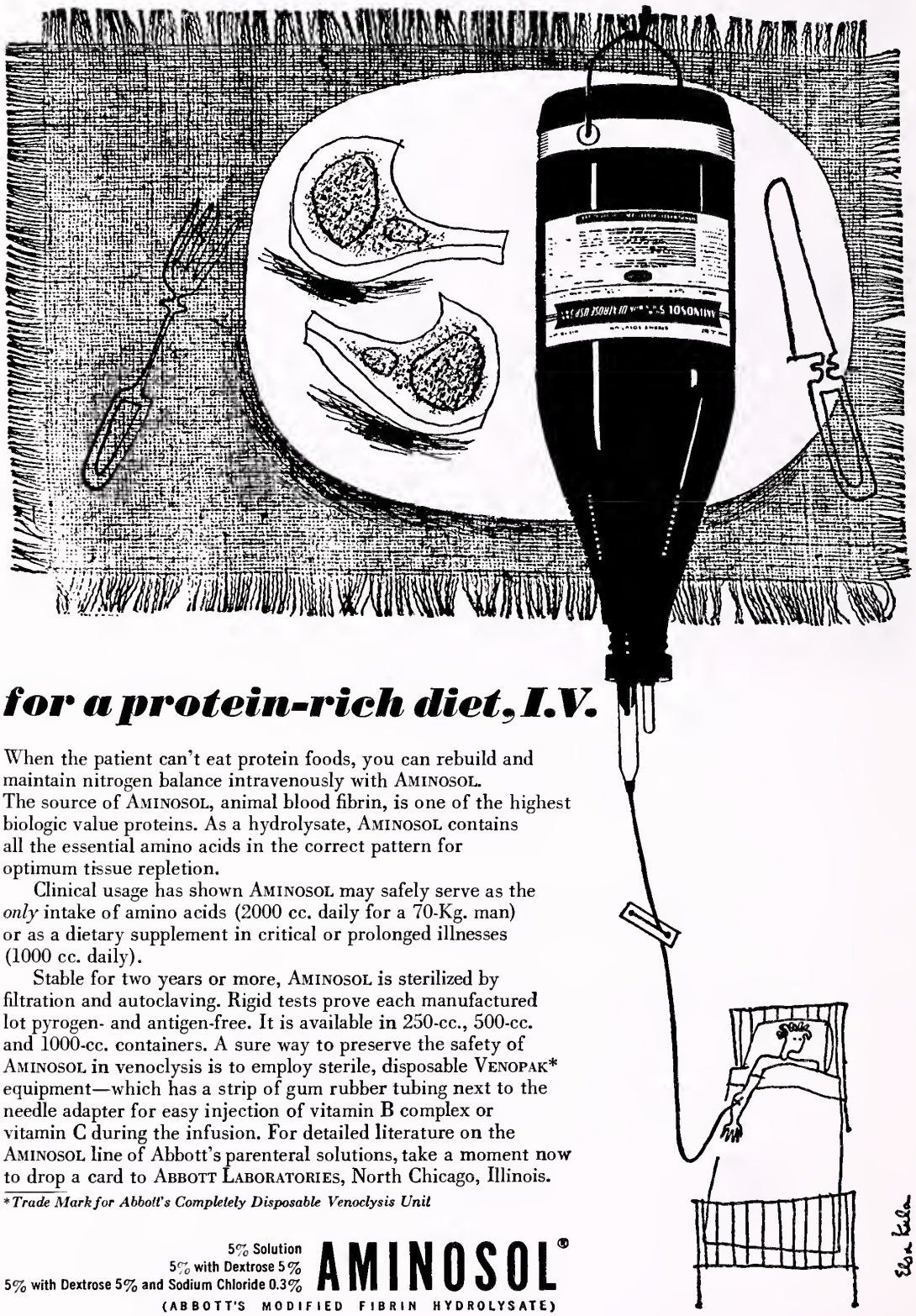
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* *Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241-245; *N.Y. State Journ. Med.*, *Vol.* 35, 6-1-25, *No.* 11, 590-592; *Laryngoscope, Feb.* 1935, *Vol. XLV, No.* 2, 149-154; *Laryngoscope, Jan.* 1937, *Vol. XLVII, No.* 1, 58-60



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* Hamblen, E. C.: Some Aspects of Sex Endocrinology in General Practice, North Carolina M. J. 7:533 (Oct.) 1946.



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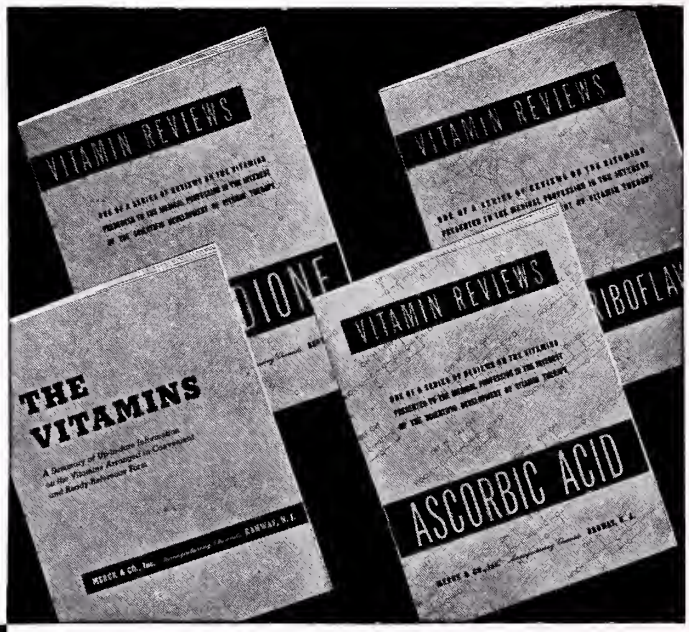


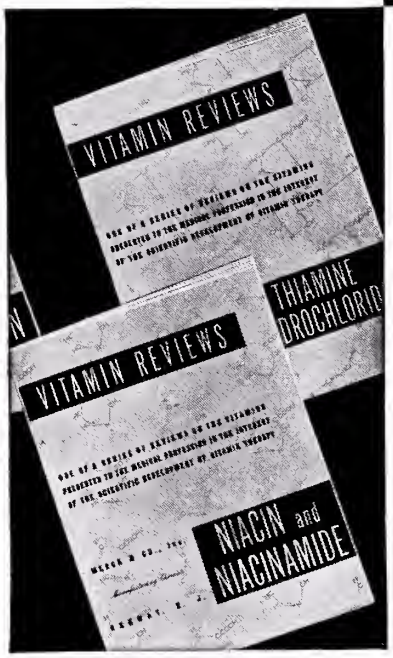
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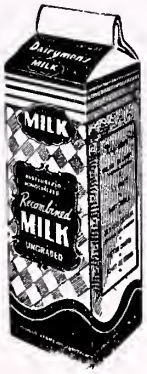
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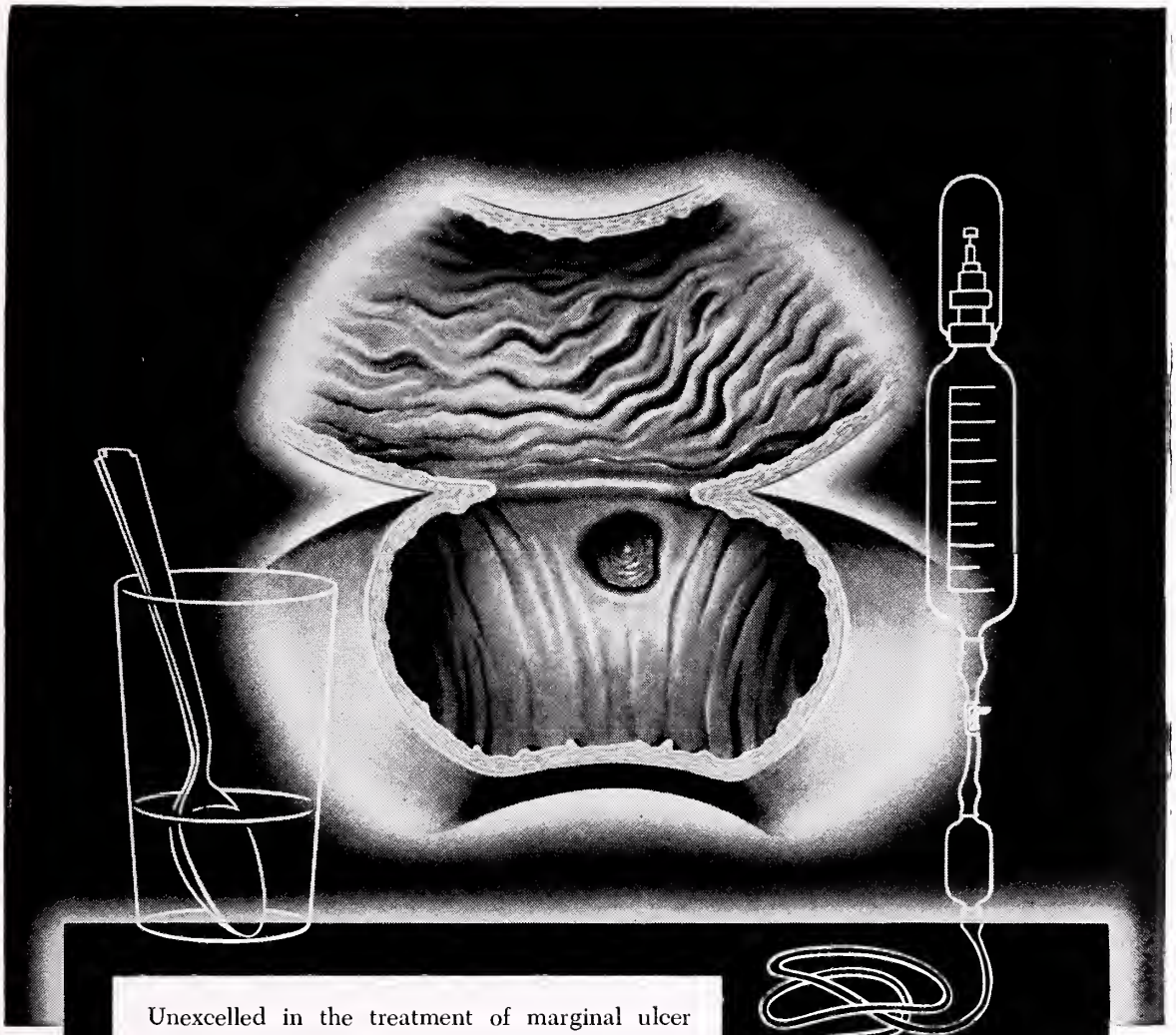


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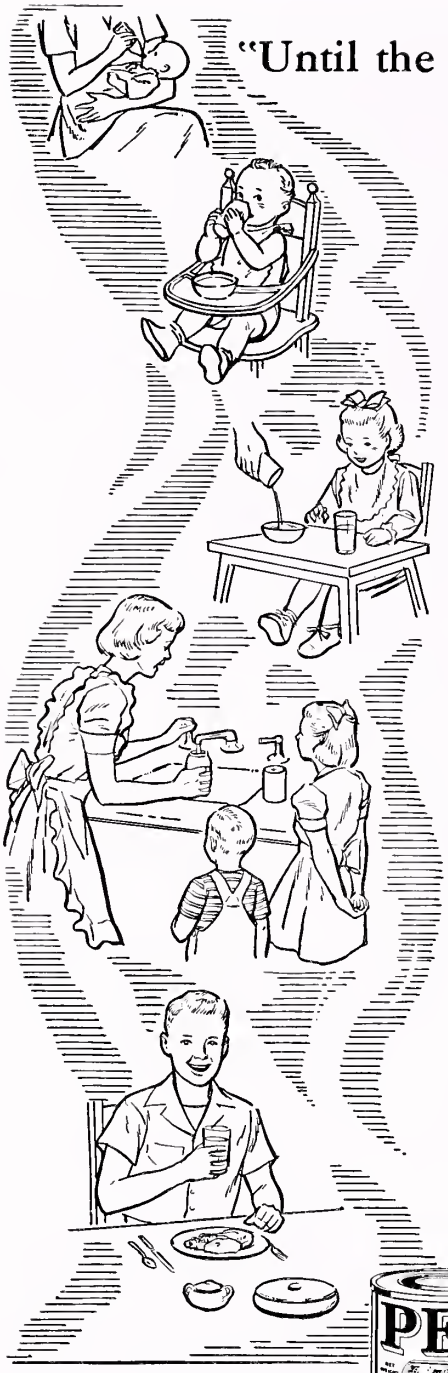
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*J'l. Pediat. 16:130, 1940



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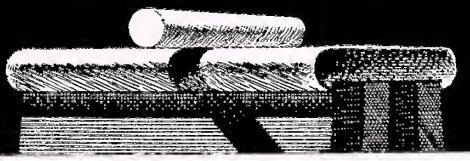
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VOLUME 9 MAY-JUNE, 1950 NUMBER 5



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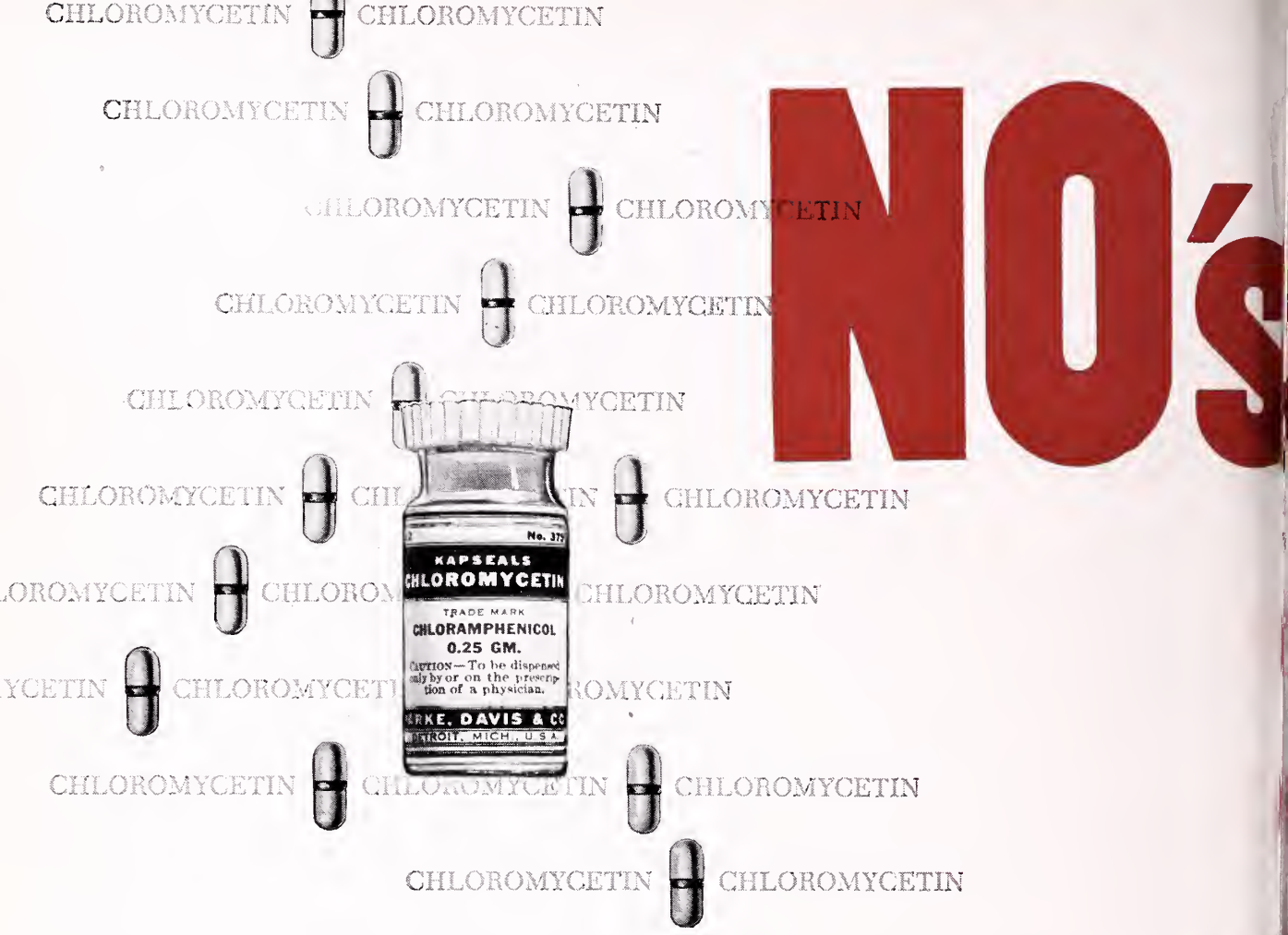
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Smadel, J. E.: J.A.M.A. *142*:315, 1950 (discussion)

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. . . Drug fever was not observed . . . side effects were slight and infrequent."

Hewitt, W.L., and Williams, B., Jr.: New England J. Med. *242*:119, 1950

0 toxic reactions or signs of intolerance were observed."

Payne, E. H.; Knaudt, J. A., and Palacios, S.: J. Trop. Med. & Hyg. *51*:68, 1948

0 symptoms or signs of toxic effects attributable to the drug were observed."

Ley, H. L., Jr.; Smadel, J. E., and Crocker, T.: Proc. Soc. Exper. Biol. & Med. *68*:9, 1948

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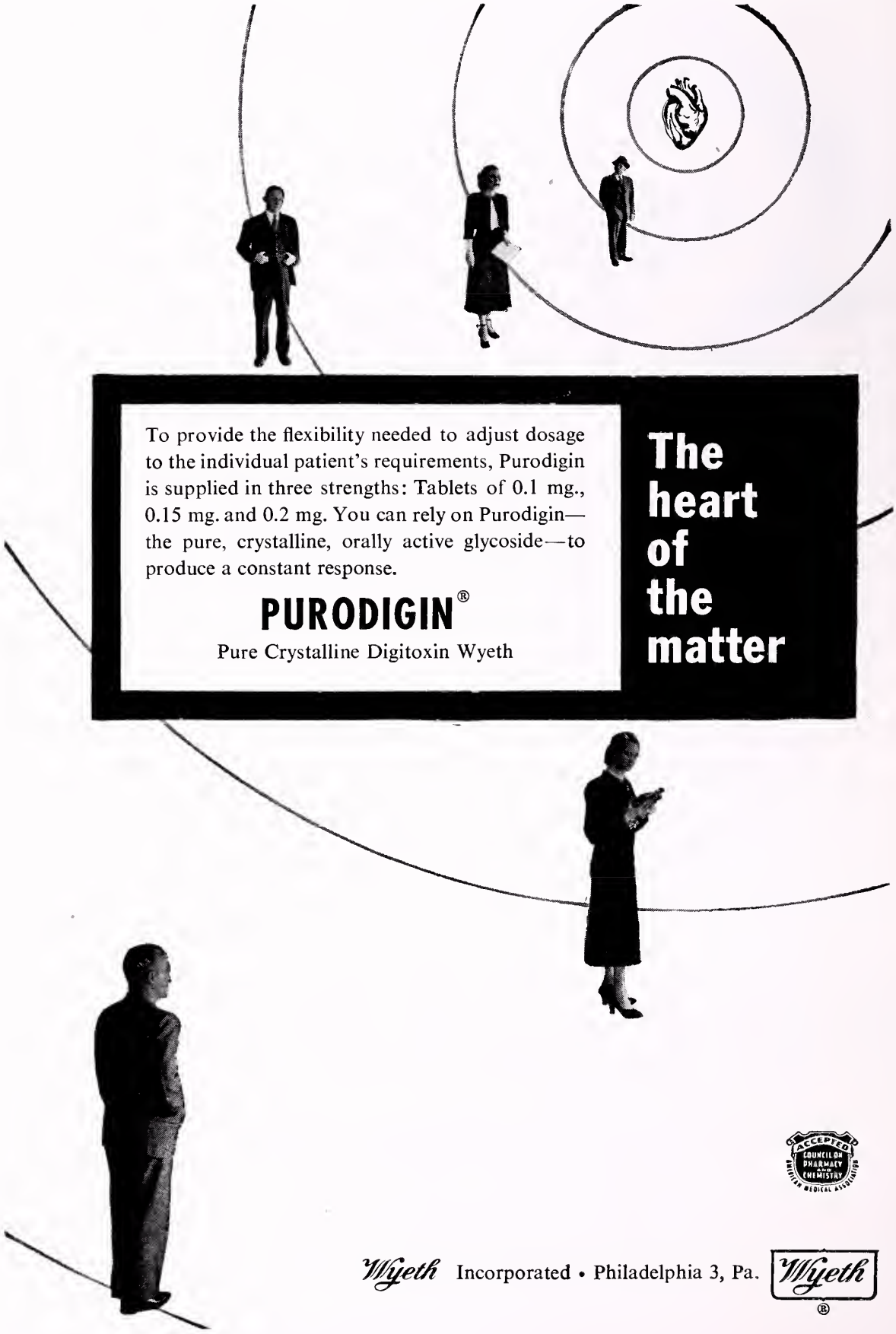
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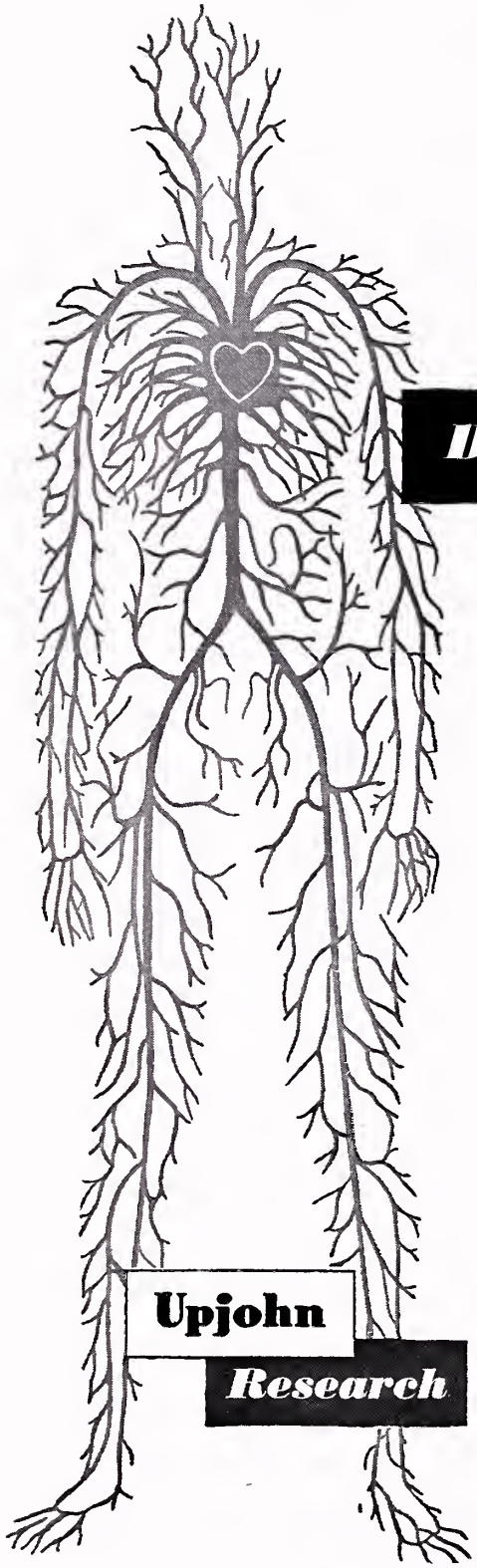
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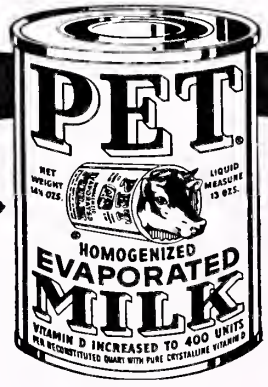
How easy it is to overlook this simple fact, that Pet Milk *is* milk . . . good milk to drink . . . and its usefulness extends far beyond bottle-feeding days.

Physicians think of Pet Milk *first* in terms of infant feeding. Its broad background of clinical trial, together with each doctor's successful use of Pet Milk in both difficult and normal feeding cases has built this lasting recognition.

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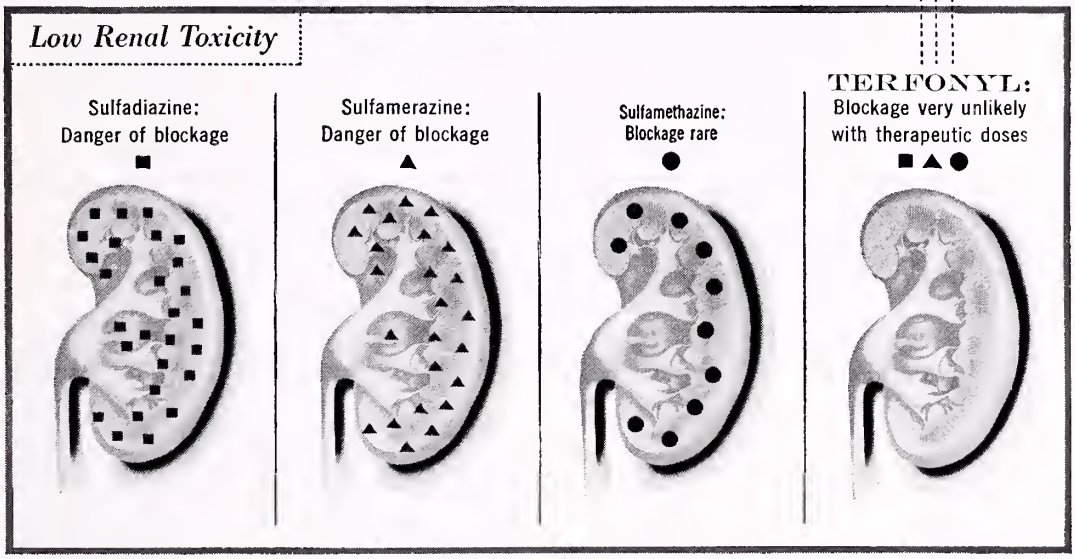
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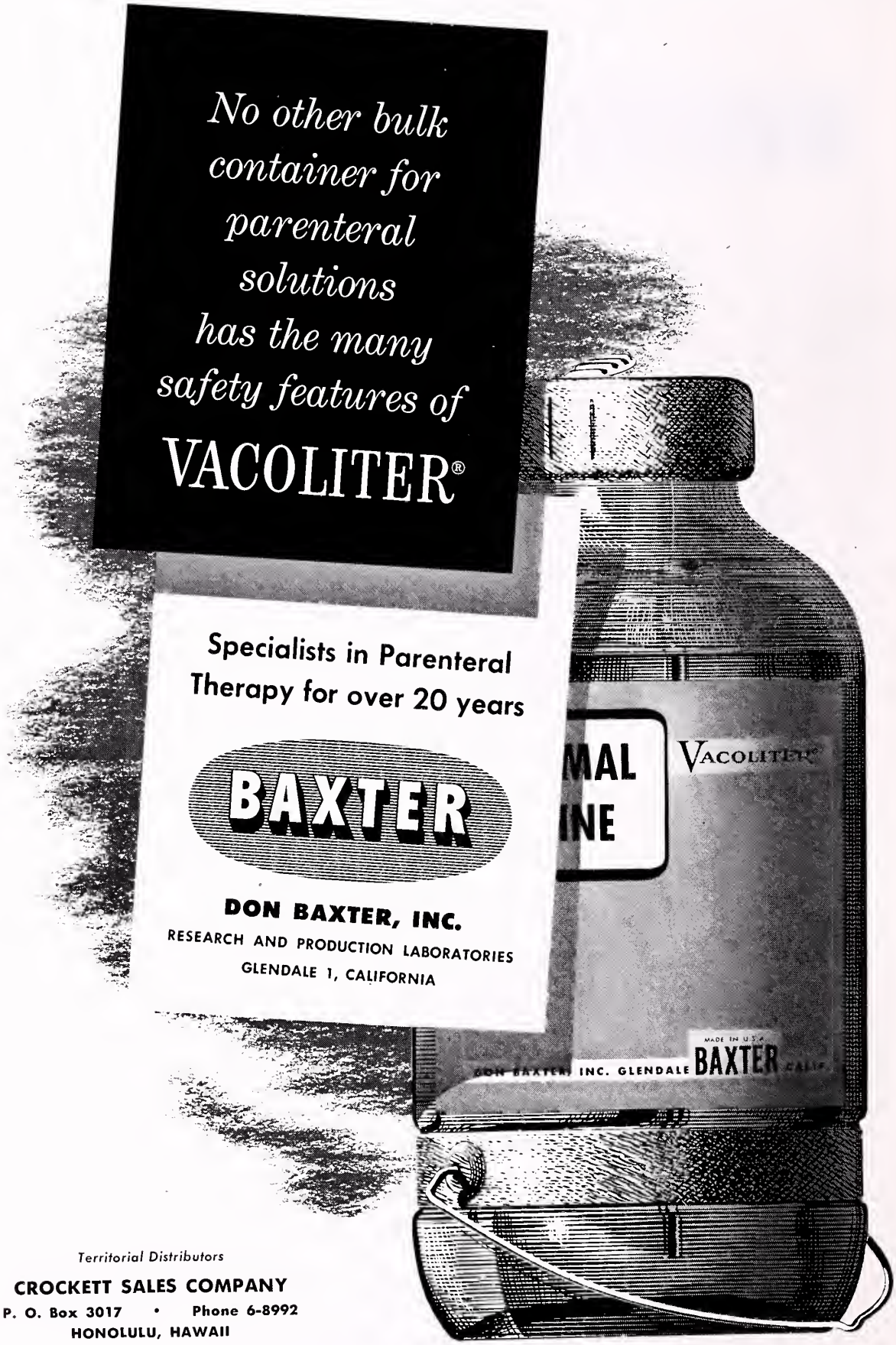
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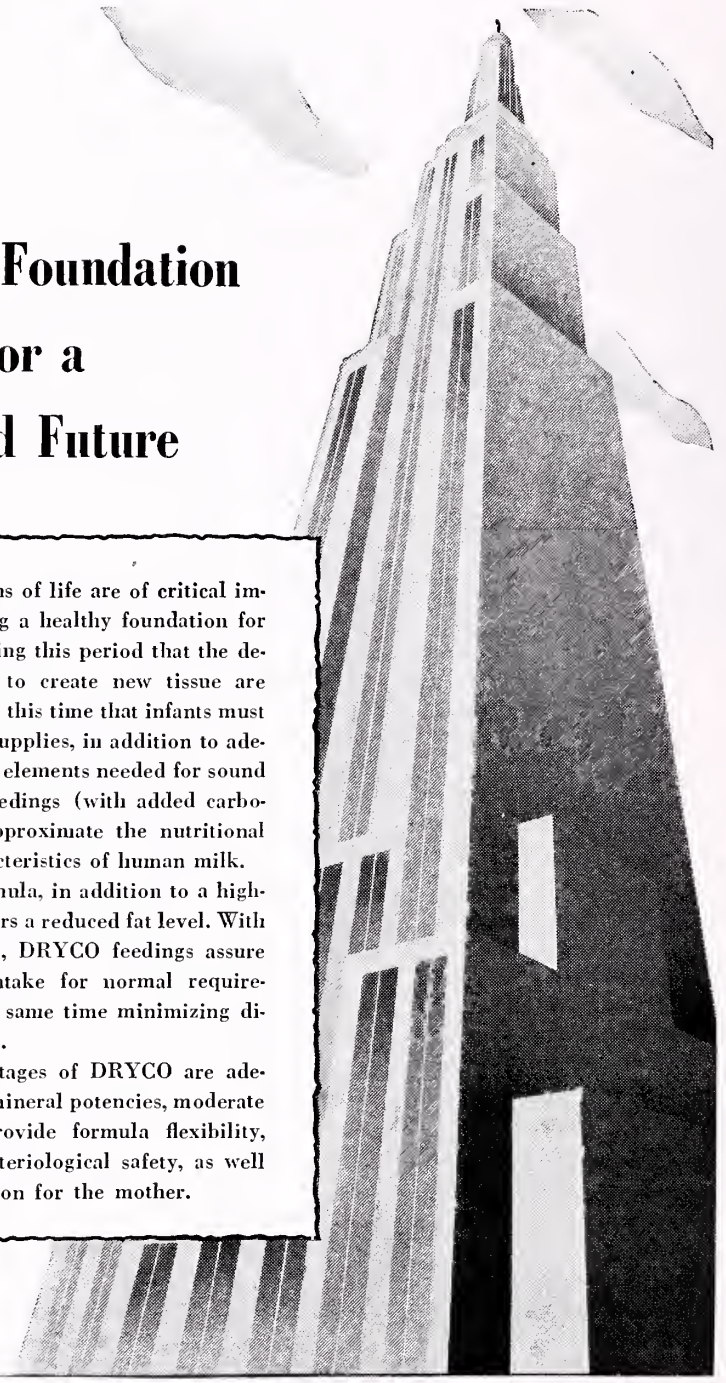
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Sulfone Therapy in Leprosy: A Three Year Study

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TWO years ago one of us (N.R.S.), in a preliminary report to the Hawaii Territorial Medical Association,[1] wrote, "It seems safe to say that for the first time drugs of real value for the amelioration of leprosy are at hand." Time has confirmed and strengthened that opinion. That report was of promin only, which we had then used for about a year. Now, with three years' experience with promin, two with diasone, and more than one with promizole, we are ready to agree with others[2] that a new day has dawned in the history of leprosy.

Basis of Report

This report concerns 346 patients—the age grouping and sex distribution as shown in Table 1, the type classification as shown in Table 3—who were treated with one or more of these drugs at the Kalaupapa Settlement and the Kalihi Hospital, or as outpatients. The statistics here given

TABLE 1.—*Distribution by age and sex of patients treated, 1945-1949.*

AGE GROUP	MALE	FEMALE	TOTAL
0— 9	2	0	2
10—19	19	19	38
20—29	44	30	74
30—39	65	30	95
40—49	46	28	74
50—59	22	17	39
60—69	10	8	18
70 and over	4	2	6
TOTALS	212	134	346

are as of April 1, 1949. We do not include the more experimental trial of sulphetrone and promacetin, which have been used recently with two groups of 4 patients each. Promin was given intravenously, the other drugs by mouth. Promin was received by a total of 211 patients, diasone by 176, and promizole by 27. These figures do not balance, as 71 patients changed from one drug to another; most of these stopped promin because of poor veins.

The maximum daily doses which we employ are: promin, 5 gm., diasone, 1.2 gm., and promizole, 6 gm. Treatment is omitted on Sundays, and a week's rest is given after two weeks of treatment with promin and after three weeks of diasone or promizole. Many patients cannot tolerate the maximum doses, but do well on less. Since we do not watch each individual to be sure he takes his medication by mouth, our dosage figures in some cases may be too high.

Side Effects

Anemia.—Hemolytic anemia is common and sometimes severe; 52 per cent of our patients showed red blood cell counts of less than 3,500,000 per cubic millimeter, hemoglobin less than 10 grams per 100 cubic centimeters, or both, at some time. This defines the "anemia" of Table 2. Almost one-half of these patients (23 per cent of the total) showed what we classed as "severe" anemia —below 3,000,000 red cells or 9 gm. of hemoglobin. To combat this condition we used iron, vitamins, liver extract injections, folic acid in a limited number of cases, and blood transfusions. Blood was supplied by the Honolulu Blood Bank, and a total of 328 transfusions were given to 107 patients.

TABLE 2.—*Treated patients developing anemia.*

DRUG	MALE		FEMALE		TOTAL	
	No.	%	No.	%	No.	%
Promin alone	37	37	33	70	70	47
Diasone alone	27	41	36	73	63	54
Promizole alone	....	....	4	50	4	33
Two or more	20	49	24	80	44	62
TOTALS	84	40	97	72	181	52

We found no significant differences in the incidence of anemia with the three drugs employed, but there was an interesting difference in sex incidence. Anemia as defined developed in 72 per cent of the female patients but in only 40 per cent of the males.

Reactional conditions.—Lepra reactions of the lepromatous or tuberculoid variety occurred in 99 patients during the treatment, and the same number of patients — not all the same ones, however—developed reactions of the erythema nodosum type. These are analyzed in Table 3.

Published with the approval of the Board of Health, Territory of Hawaii. Read at the 59th Annual Meeting of the Hawaii Territorial Medical Association, May, 1949. Published simultaneously in the *International Journal of Leprosy*.

[1] Sloan, N. R.: Promin and Other Sulfones in Leprosy, HAWAII MED. J. 7:19 (Sept.-Oct.) 1947.

[2] Faget, G. H., and Erickson, P. T.: Chemotherapy of Leprosy, J.A.M.A. 136:451 (Feb. 14) 1948. Johansen, F. A., and Erickson, P. T.: Studies on the Therapy of Leprosy, Proc. 4th Internat. Cong. Trop. Med. and Malaria, 365-373 (May) 1948. Johansen, F. A., and Gray, H. H.: The Modern Treatment of Leprosy. Med. Woman's Journal, 56:9-24 (Sept.) 1949. (These references may be consulted for additional bibliography.)

TABLE 3.—*Classification of patients treated, and incidence of various types of reactional conditions.*

CLASSIFICATION AND REACTIONS	DRUG				TOTAL
	Promin alone	*Diasone alone*	*Promizole alone*	*Two or more*	
Classification of the patients treated					
Lepromatous	118	71	8	56	253
Tuberculoid	23	35	3	12	73
Indeterminate	7	9	1	3	20
TOTALS	148	115	12	71	346
Reactional conditions observed					
Lepromatous:					
Mild and few	17	6	1	8	32
Many or severe	26	8	2	14	50
TOTALS	43	14	3	22	82
Tuberculoid:					
Mild and few	4	4	....	4	12
Many or severe	1	1	1	2	5
TOTALS	5	5	1	6	17
Erythema nodosum:					
Mild and few	30	18	1	4	53
Many or severe	19	10	2	15	46
TOTALS	49	28	3	19	99
Erythema nodosum and lepromatous	22	4	1	7	34
Erythema nodosum and tuberculoid	....	....	....	1	1

It is our impression that lepra reactions are little, if any, more frequent in treated cases than in untreated ones, but erythema nodosum reactions have been much more common than before the sulfone era. In our series there were fewer reactions with diasone than with promin.

The erythema nodosum reactions may be distressing, but some workers feel that they are a favorable occurrence.[3] That was not the case with two of our youngest patients.

Twelve patients (all receiving promin) developed other cutaneous eruptions, mostly erythematous and pruritic but in one case urticarial. Two patients (one receiving promin, one diasone) suffered from generalized pruritus, apparently connected with treatment but without cutaneous lesions.

Polyneuritis, often severe and crippling, occurred in 9 patients (promin 5, diasone 1, promin and diasone 3). In our opinion this is probably more than would have occurred without treatment.

Other side effects.—Nausea is common in patients under any of the sulfones, perhaps most frequent in those taking the larger doses of promizole. Vomiting may occur. Some patients receiving promin sneeze regularly after each injection.

One asthmatic patient was unable to continue treatment because of aggravation of that condition. This was not important since her disease was already arrested, but she had requested treatment. One patient experienced febrile reactions to promin injections. In addition to 28 patients who died, 40 others stopped treatment. Of these, 15 had been "arrested" cases before starting treatment and 21 stopped after the disease became arrested. Only 4 refused to continue treatment while still active.

[3] Wolcott, R. R.: Erythema Nodosum in Leprosy, Internat. J. Leprosy 15:380 (Oct.-Dec.) 1947.

Results

The results of the treatment are striking. Ulcers heal, laryngeal stenosis is lessened, vision occasionally improves, nodules subside, and bacilli disintegrate and eventually disappear. Actual arrest (dare we say "cure?") does occur; 50 patients have been granted "temporary release" since starting treatment, and in about 75 per cent of these we feel that the treatment was a major factor. Only 3 tracheotomies have been performed in the past two years, as compared with an average of 10 per year in the five years preceding; and 11 out of 39 patients with tracheal tubes have been able to remove them as a result of treatment. In several others the larynx is improved enough to permit removing the tubes, but the patients prefer to wait because of nasal obstruction.[4]

TABLE 4.—*Results of treatment, gross data.*

DRUG	CASES	IMPROVED	UNCHANGED	WORSE
Promin alone	148	122 (83%)	21	5
Diasone alone	115	96 (83%)	17	2
Promizole alone	12	8 (67%)	4	....
Two or more	71	63 (89%)	8	....
TOTALS	346	289 (83.5%)	50 (14.5%)	7 (2.0%)

As shown in Table 4, definite improvement occurred in 83.5 per cent of all patients treated, while only 14.1 per cent failed to improve during the period under study. Most of the latter, however, had inadequate treatment or their disease was arrested before treatment began. Only 2 per cent—7 out of the 346 cases—regressed under treatment. Never before the sulfone period has any treatment of leprosy produced comparable results.

TABLE 5.—*Dosage groups, total grams of sulfones received.*

GROUP	PROMIN	DIASONE	PROMIZOLE
I	Less than 500	Less than 100	Less than 600
II	500–1000	100–200	600–1200
III	1000–2000	200–400	1200–1800
IV	2000–3000	400–600	1800–2400

To ascertain the effect of varying amounts of the sulfones administered during the period of treatment, the cases are classed in four dosage groups, as shown in Table 5. Each group represents comparable total doses of the three drugs, singly or in combination. As seen in Table 6, the

[4] Sloan, N. R.: Effects of Sulfone Treatment on the Larynx in Leprosy, Internat. J. Leprosy 16:329 (July-Sept.) 1948.

percentage of improvement rises with increasing dosage.

TABLE 6.—*Results of treatment by dosage groups.*

GROUP[a]	CASES	IMPROVED	UNCHANGED	WORSE
I	73	43 (59%)	28	2
II	62	50 (81%)	9	3
III	140	127 (91%)	11	3
IV	71	69 (97%)	2	....
TOTALS	346	289 (83.5%)	50	7

[a] Groups as in Table 5.

The figures given in Table 7 indicate that improvement occurs in most cases even after many years of illness. In many of the patients who did not improve the disease was actually arrested before treatment, but they had not applied for release. Hope for complete arrest of the disease, however, and for avoidance of deformity and blindness, is much greater when treatment is begun early.

TABLE 7.—*Results of treatment, by period of commitment.*

PERIOD	CASES	IMPROVED	UNCHANGED	WORSE	RELEASED AFTER TREATMENT
Less than 1 year	75	64 (85%)	9	2	21
1– 5 years	88	72 (82%)	13	3	7
6–10 years	71	62 (87%)	17	2	7
11–15 years	57	50 (87%)	7	....	7
16–20 years	26	20 (77%)	6	....	5
Over 20 years	29	21 (38%)	8	....	3
TOTALS	346	289 (83.5%)	50	7	50

As the data presented show, the percentages of improvement increase with the duration of treatment and with the total dose.

The matter of relation of type and advancement of the disease, dealt with in Table 8, will be considered later.

TABLE 8.—*Results of treatment by type and degree of advancement of the disease.*

TYPE AND DEGREE	CASES	IMPROVED	UNCHANGED	WORSE	RELEASED AFTER TREATMENT
L3	77	69 (90%)	7	1	2
L2	135	115 (85%)	17	3	7
L1	41	34 (83%)	6	1	6
I3	4	1 (25%)	3	....	2
I2	2	1 (50%)	1	....	....
I1	14	10 (71%)	4	....	3
T3	3	2 (67%)	1	....	....
T2	29	25 (86%)	3	1	8
T1	41	32 (77%)	8	1	22
TOTALS	346	289 (83.5%)	50	7	50

What is perhaps most important is that in cases diagnosed and treated early, the patients in relatively good general condition, the disease does not progress. The advanced cachectic patient is now rarely seen in our wards. Today, we feel safe in assuring the patient who comes early for treatment that he has an excellent chance of recovery. This news is spreading, and more people are coming willingly for contact study and early diagnosis.

Deaths

As said, 28 of the patients have died. In 4 cases —one of which died in acute lepra reaction—the cause of death was unknown and permission for necropsy was refused. A fifth patient died of cerebral edema, the cause of which was not definitely determined. It does not appear to have been caused by the sulfone treatment; possibly it was a reaction to sulfonamides which he had received for an intercurrent infection. One died of agranulocytosis, possibly related to the treatment. If all six of these deaths were to be classed as connected with the treatment—and this is extremely doubtful—they constitute 21 per cent of the deaths, or 1.8 per cent of the cases treated.

Of the remainder, there were 2 deaths from bronchitis associated with an indwelling tracheal tube; one of these patients, who was mentally ill, removed his tube and put pieces of toothbrush down his trachea. One died of chronic nephritis, probably amyloid, of leprous origin. The others died of causes unrelated to leprosy or its treatment: tuberculosis (10 cases), carcinoma (3 cases), brain tumor, cryptococcus meningitis, cerebral hemorrhage with lobar pneumonia, and nephrolithiasis with pulmonary embolus (1 case each). It should be borne in mind that in some patients the leprosy improved as a result of sulfone treatment, but they died of other conditions.

Questions

1. Do the drugs affect tuberculoid as well as lepromatous leprosy? We feel that we are ready to say, "Yes." Evaluation is difficult, as tuberculoid cases frequently regress spontaneously although often with much scarring, but our results (see Table 8) seem significant. Of 61 presumably active tuberculoid cases — those which had not been granted "temporary release," prior to treatment—50, or 82 per cent, showed improvement, which figure is practically identical with that of the series as a whole. No less than 30 (49 per cent) of these cases were granted "temporary release" after treatment.

2. Is early treatment desirable? Yes, definitely. It seems safe to say that almost no cases treated early become severe; and the earlier the treatment, the better the chance for arrest.

3. Have the sulfones cut the death rate? Yes, greatly. Other factors are involved, but deaths from bronchial obstruction, leprous cachexia, and renal amyloidosis have almost disappeared. The average death rate for the three fiscal years preceding sulfone treatment was 9.3 per cent; for the

fiscal year 1949 it was 5.9 per cent.

4. Which is the best sulfone? We do not know. The statistical results with promin and diasone are almost identical, and we have used the other drugs on too few cases for their figures to be of value. Some patients appear to tolerate one drug best, some another. Often after a period of treatment with one drug a change will be of benefit. Naturally, we hope that better and less toxic drugs will soon appear.

5. Is outpatient treatment possible? Yes—for bacteriologically negative cases, if home conditions are satisfactory. In a highly endemic area such as Hawaii, we believe that all bacteriologically positive cases should receive institutional care. In our series, 5 patients released from the institutions continued their treatment outside; and 9 "closed" cases (bacilli not demonstrated by ordinary methods) who are receiving home treatment have not been admitted. It is hoped that by early diagnosis the number of such cases may be increased.

6. Do pregnant patients stand the treatment well? Yes. Pregnancy cannot be considered a contraindication. We have no evidence of any effect on the child.

Conclusions

Experience over a period of three years with the sulfone drugs in the treatment of 346 patients has convinced us that they constitute the best treatment for leprosy now available. We believe that they are effective in tuberculoid as well as in lepromatous cases. They are certainly more effective in early cases than in later ones. Thus it is now more important than ever to diagnose cases of leprosy early and to give them prompt treatment.

Discussion

DR. ERIC A. FENNEL: Two years ago, on Kauai, in discussing Dr. Sloan's preliminary report on the use of sulfones in leprosy, I told you that you had heard a paper of greatest importance to Hawaii Nei.

Now you have heard his even more important report on the three year use of these new drugs on man's old enemy. It confirms the original hopes and impressions, timorously held at that time.

I have lived through and been a part of this great metamorphosis; with only a few more years added to my allotted time, I might see the complete solution of one of Hawaii's biggest problems—a million dollar a year health problem.

What Dr. Sloan has said this evening emphasizes—makes vitally important—one fact, and that is that our Kalaupapa Settlement for . . . [leprous patients] has changed from a purely domiciliary institution, in which the superintendent, too often a politician, was the dominant factor, and the resident physician a mere dispenser of pink pills and sympathy, was a fifth wheel on the wagon.

It has now changed into an actively therapeutic hospital for Hansenites and is armed with sulfonamides and sulfones and modern medical methods—including a laboratory.

Today, there in Kalaupapa, the physician actually is the dominant figure and the superintendent an administrator, concerned with housing, food and clothing. But not in the eyes of the LAW, which still continues the layman as the superior officer—a brass hat.

An intolerable situation has arisen in Kalaupapa. The friction between the medical side of the institution and the administrative side has become so unbearable that certainly, Kalaupapa is not large enough to hold both Mr. Judd, an ex-politician, and Dr. Sloan, an eminent leprologist.

As a former member of the Board of Hospitals and Settlement, I plead guilty to neglect of duty (and do so on behalf of my other former fellow Board members). After the late lamented Legislature returned the administration of our leprosy problem to the Board of Health, whence it was taken nearly 20 years ago, I planned to initiate a movement to place Kalaupapa in the hands of a *Medical Superintendent,* with administrative aid.

Before I could make the motion, Governor Stainback promptly and hurriedly removed me from office. Now you, my fellow physicians and citizens, share with me the responsibility of that lost motion.

Soon the Board of Health must make the decision—it must be either Judd, the politician, or Sloan, the leprologist. The entire medical personnel of Kalaupapa, excluding the Catholic Sisters, has tendered its resignation, effective on the date of Sloan's enforced leaving of the Settlement. That would be one of the worst calamities that could affect our lovely islands. And with real success just around the corner! The decision will be up to the Board of Health—God help it—and to Charlie Wilbar, a Quaker and a man of peace.

Please, fellow physicians, stand solidly behind that one of us who has so unselfishly given years and efforts to this, our problem of leprosy. He is the only real leprologist who has ever served Kalaupapa—and now, with the new tools, should go even further. Please help me guard him against the selfish politicians.

Gentlemen, I give you a toast: Sloan, Kalaupapa's White Knight.

Hansen's Disease in Hawaii, 1939-1949

EDWIN K. CHUNG-HOON, M.D.
HONOLULU

THE EARLIEST reference to Hansen's disease in Hawaii was in the early 1820's. Additional references are to be found about specific persons who were afflicted during the 1830's, 40's and 50's. The early reports of the Board of Health made considerable mention of the growing importance of the disease. Seemingly the infection, *"mai pake"* or "Chinese disease" as it was called, had reached such proportions by 1864 so as to cause the Legislature of the Kingdom to enact a segregation law which it was hoped would prevent further spread of the dread disease. It was not until 1866, however, that the first tabulation of the number of reported cases of Hansen's disease was made. The count for that year was 141; 139 Hawaiians and 2 Chinese. But judging by the recorded concern of the day, the under-reporting of cases must have been considerable. Further evidence of under-reporting is indicated by the fact that just a few years later there were about 2,000 cases in segregation. Peak reporting was reached in 1888 when 579 cases were tabulated. Since that time the incidence of the disease has steadily declined. As of June 30, 1949 there was only 272 Hansen's disease patients hospitalized in the Territory, and less than 3 new cases developing per month.

The administration of the Hansen's disease program was a Board of Health responsibility from the earliest periods of the Hawaiian government to July 1, 1931, when the Board of Hospitals and Settlement assumed the responsibility. On July 1, 1949 the administration of the Territory's Hansen's disease program was again vested in the Board of Health. At the same time the 25th Legislature of the Territory of Hawaii also abolished the Board of Hospitals and Settlement. This change plus encouraging developments in the treatment of Hansen's disease and renewed interest in the epidemiology of the disease make it an opportune time for the presentation of a statistical survey of the disease.

The survey covers the period from July 1, 1939, to July 1, 1949, and data were obtained from the records of the Board of Hospitals and Settlement.

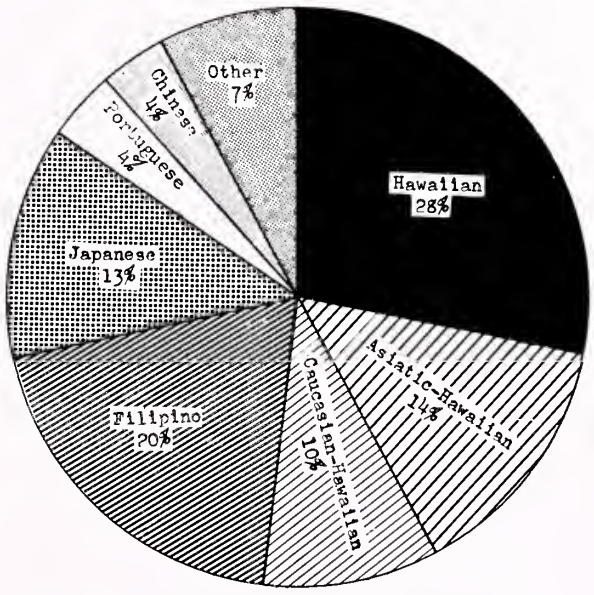
From the Department of Health, Territory of Hawaii. Approved for publication by Charles L. Wilbar, Jr., M.D., President of the Board of Health.
Received for publication April 11, 1950.

New Cases

There have been an average of 32 cases per year reported during the past ten years, with a range of from 40 down to 24 cases per year. This is a drastic change from the situation fifty years ago when ten times this number were being reported each year.

Race and Sex

While there are fewer cases of Hansen's disease among Hawaiians than formerly, the morbidity rate (cases per 100,000 population), due to a rapidly declining population, is higher now than ten years ago. During the past ten years part-Hawaiians, on the other hand, have shown a considerable decrease in rate—from 23 down to 10. The Filipinos are the only other ethnic group to show any appreciable increase. Another decrease was noted among the Chinese, while the Caucasians, Japanese and Koreans remained unchanged.



GRAPH 1.—*Distribution of All Cases of Hansen's Disease by Race, 1940-1949.*

During the ten-year study period there have been more than twice as many cases reported for males as for females. However, unless the sex ratio of the population is considered the ratio

of male cases to female cases is subject to misinterpretation.

The average morbidity rate among all races by sex was 8 for males and 5 for females, a ratio of 160 males per 100 females. By race the sex ratio varied from 36 to 700 males per 100 females.

TABLE 1.—*10 Year Average Morbidity Rate by Race, 1940-1949.*

RACE	RATE
Hawaiian	70.2
Part-Hawaiian	13.9
Caucasian	1.1
Chinese	4.3
Japanese	2.6
Korean	8.6
Filipino	13.6
Others	66.8

During the ten-year period rates among Hawaiian females have been increasing while those for Hawaiian males have decreased. Rates for part-Hawaiians have decreased in both sexes. Of the 12 Caucasian males reported, 8 were Portuguese. No cases of Caucasian males were reported during either 1948 or 1949. Among the 8 Caucasian female cases, 7 were Portuguese. Hansen's disease in the Chinese, except for one case in 1940, has been confined entirely to males. The fewest cases were reported among Koreans; 2 were males and 4 females. This is the only group that showed proportionately more females than males.

TABLE 2.—*Morbidity Rates by Race and Sex and Ratio of Males/100 Females.*

	H	P-H	CAU	CH	JAP	KOR	FIL	OTH
Male	90	15	1	7	3	5	17	75
Female	49	12	1	1	3	14	3	35
Males per 100 Females	184	125	100	700	100	36	567	214

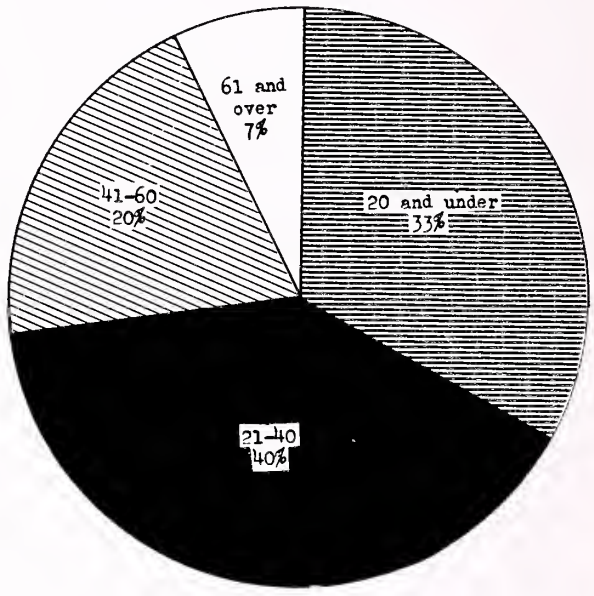
While the general trend for all races has been down, the rate for females was about 10 per cent higher the second five years than the first five years of the study. Comparison between these two five-year periods by race and sex showed increases for Hawaiian females (over 50 per cent), Caucasian females, Japanese females and Filipino females. All male rates decreased except those for the Koreans and Filipinos.

History of Contact

Upon questioning, approximately 60 per cent of the new cases knew of no previous contact with the disease. Actual contact obviously cannot be ruled out, however, solely on the basis of such information because quite frequently a patient may have been too young to be aware of it or will have forgotten his early contact by the time his initial manifestations appeared. Epidemiological studies have been started which will include more detailed information concerning the genealogy of the patients. In this manner connection of present cases with those of the past may be possible. Twenty per cent of the cases of the past ten years occurred in Filipinos who are relative newcomers to the Territory; genealogical information on these cases is not available and would be difficult to secure.

Age

Of the 316 new cases studied, 40 per cent were between the ages of 20 and 40 years. The youngest was 5 and had had his initial manifestations for four months. The oldest was 91 and his initial manifestations were of seven months' duration. During the first five years of the study (1939-1944) 26 per cent of the new cases were 40 years and over. During the last five years (1945-1949) 29 per cent were over 40 years of age. Even greater increases were noted from the first to the second period in the age group 60 and over.



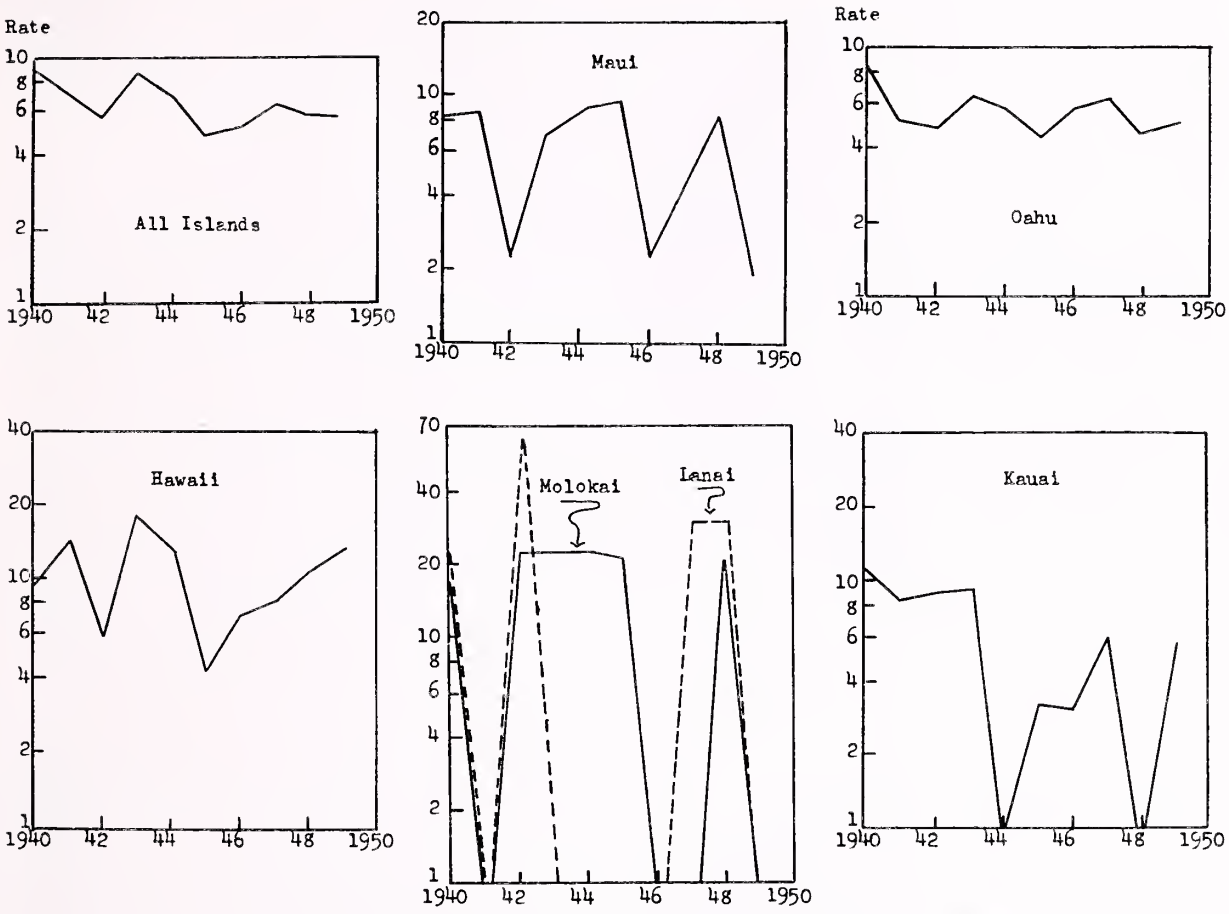
GRAPH 2.—*Per Cent Age Distribution of 316 New Cases.*

TABLE 3.—*Per Cent Distribution by Age.*

AGE	1939-44	1945-49
Under 20	33%	32%
20–40	41	39
40–60	20	21
60 and over	6	8
TOTAL	100	100

Geographic Distribution

The average morbidity rates by islands ranged from 5.4 on Oahu to 15.9 on Lanai. However, because of the size of population and the number of cases, Hawaii's rank of third from highest is a much more significant figure. For example, if there had been one less case on Molokai, Hawaii would have ranked second.



GRAPH 3.—*Morbidity Rates for Hansen's Disease by Island by Year, Territory of Hawaii, 1940-1949.*

Duration of Manifestations

Of the new cases having knowledge as to when manifestations of Hansen's disease first appeared 78 per cent gave histories of twelve months or less while only 7 per cent reported durations of over five years. The shortest duration of manifestations prior to official diagnosis was one day; the longest about twenty-five years (a bacteriologically negative neural case).

TABLE 4.—*Cases and Rates by Island, 1939-1949.*

ISLAND	CASES	RATE
Oahu	184	5.4
Hawaii	74	10.6
Maui	28	6.5
Kauai	19	5.9
Molokai	6	13.1
Lanai	5	15.9
TOTAL	316	6.4

A comparison of duration of manifestations of cases reported during the first five years with those of the second five years indicates that cases are now being diagnosed earlier. Whereas 73 per cent of the cases had durations of less than one year during the first half, 82 per cent fell in this category in the second half.

Source of Report

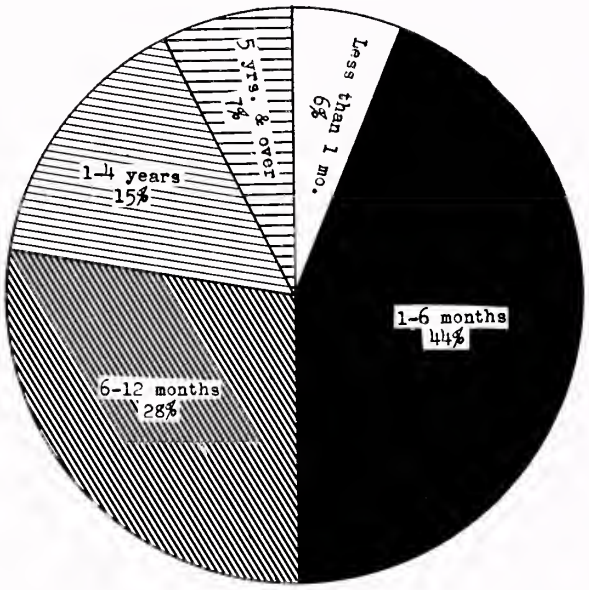
Private physicians reported most of the new cases and Government Physicians the second largest number. Together these two groups of physicians reported 78 per cent of all new cases.

TABLE 5.—*Per Cent Distribution of Duration of Manifestations.*

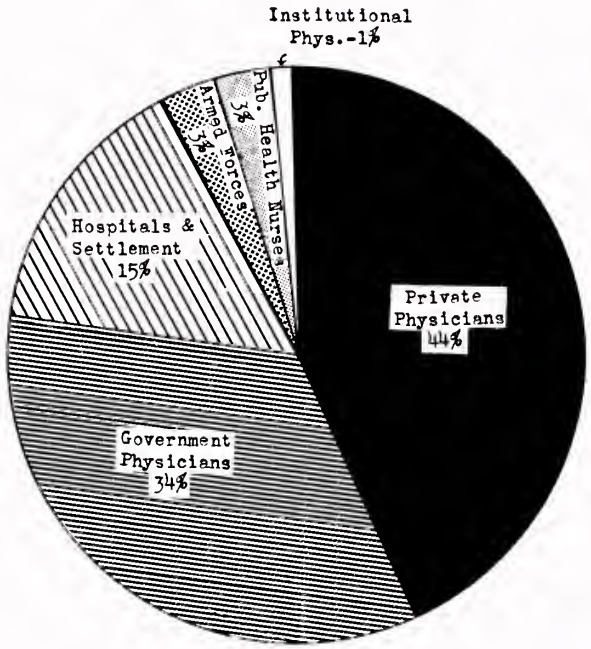
DURATION	1939-44		1945-49	
Under 1 Year		73		82
Less than 1 Month	6		5	
1– 6 Months	43		45	
6–12 Months	24		32	
1–4 Years		18		13
5 Years and Over		9		5
TOTAL		100		100

Bacterioscopy

For the entire ten-year period 61 per cent of the new cases were bacterioscopically positive and 39 per cent were negative. However, not only were there fewer cases reported during the second five-year period, but the per cent found positive dropped. From 1939 to 1944, of the cases reported 69 per cent were found to be positive; from 1945 to 1949 the proportion of positives had dropped to 52 per cent.



GRAPH 4.—*Duration of Manifestations: Per Cent Distribution.*



GRAPH 5.—*Per Cent Distribution of Cases by Source of Report.*

Type of Disease

The pattern of classification into three types (lepromatous, tuberculoid and indeterminate) was adopted in 1945. Analysis by type has, therefore, been limited to new cases reported only during the last five years.

The tuberculoid type accounted for 45 per cent of the cases; 41 per cent were of the lepromatous type and 14 per cent indeterminate. Eighty-two per cent of the tuberculoid cases and 85 per cent of the indeterminate cases were bacterioscopically negative.

TABLE 6.—*Bacterioscopy by Type of Disease.*

BACTERIOSCOPY	TUBERCULOID	LEPROMATOUS	INDETERMINATE	ALL TYPES
Positive	12 (18%)	60 (100%)	3 (15%)	75 (52%)
Negative	53 (82%)	0 (.....)	17 (85%)	70 (48%)
TOTAL	65 (100%)	60 (100%)	20 (100%)	145 (100%)

Of the tuberculoid cases 52 per cent were males and 48 per cent females. Lepromatous cases were divided 62 per cent males and 27 per cent females. The indeterminate type had the greatest preponderance of males, 75 per cent.

TABLE 7.—*Type of Disease by Per Cent Males and Females.*

SEX	TUBERCULOID	LEPROMATOUS	INDETERMINATE	ALL TYPES
Male	34 (52%)	38 (63%)	15 (75%)	87 (60%)
Female	31 (48%)	22 (37%)	5 (25%)	58 (40%)
TOTAL	65 (100%)	60 (100%)	20 (100%)	145 (100%)

Males were more prone to have the lepromatous type of the disease while over fifty per cent of the females had the tuberculoid type.

TABLE 8.—*Per Cent Distribution of Type of Disease by Sex.*

SEX	TUBERCULOID	LEPROMATOUS	INDETERMINATE	ALL TYPES
Male	39	44	17	100
Female	53	38	9	100

Disposition of Cases

Four hundred and fifty-four cases were removed from the registry during the years 1939 to 1949. Deaths accounted for 80 per cent or 365 of the cases; 17 per cent of the cases were discharged and 3 per cent left the Territory. Of the deaths 90 per cent were among hospital patients and 10 per cent among outpatients. Comparing the first five-year period with the second, significant changes are noted as can be seen in the following table:

TABLE 9.—*Per Cent Disposition of Cases.*

	1939-1944	1945-1949
Died	87%	72%
Discharged	12%	22%
Left Territory	1%	6%

Summary

1. An average of 32 cases of Hansen's disease have been reported per year in Hawaii between 1939 and 1949.
2. The morbidity rate for all races has decreased. However, rates for Hawaiians and Filipinos have increased. The increase in the Hawaiian rate was due to an increase among females; the males showed a decrease. The disease in the Chinese, except for one case in 1940, has confined itself to males.

3. The sex ratio of the disease by race varied from 36 to 700 males (average, 160) per 100 females.
4. Forty per cent of the cases reported were between the ages of 20 and 40. Cases reported during the second half of the study were somewhat older than those reported during the first half.
5. Oahu reported proportionately the fewest cases and Lanai the most, the rates being 5.4 and 15.9 respectively.
6. Seventy-eight per cent of the recognized manifestations had a duration of less than 1 year.
7. Private physicians reported 44 per cent of the cases.
8. Sixty-one per cent of the new cases were bacterioscopically positive. However, the per cent found positive the first half of the period was 69 while during the second half only 52 per cent were found to be positive.
9. By type the disease was divided 45 per cent tuberculoid, 41 per cent lepromatous and 14 per cent indeterminate.
10. Males outnumbered females nearly 2:1 among the lepromatous cases, but only 1.1:1 among the tuberculoid cases.
11. During the ten-year study period 454 cases were removed from the registry. Eighty per cent had died, 17 per cent were discharged and 3 per cent left the Territory. The proportion discharged nearly doubled (from 12 to 22 per cent) during the latter half of the study period.

Acknowledgment

I wish to express appreciation to Mr. M. A. Taff, Registrar General of Vital Statistics, Department of Health, for his valuable assistance in preparing this report.

1013 Bishop Street.

Surgical Ideals

ROGERS LEE HILL, M.D.
HONOLULU

THIS OCCASION celebrates the second anniversary of the birth of the Honolulu Surgical Society. Although sporadic attempts to create such an organization had previously been attempted, some disturbing factor prevented its formal organization and evolution until two years ago. The need for such an organization had long been demonstrated and the idea remained ever present in some of the fertile surgical brains of this island metropolis. It was only natural and appropriate that your first selection of a president should fall on the sturdy shoulders of Joe Strode, who has contributed so much to the development of surgery in these islands and in a parallel fashion to the development and organization of this Society. When you selected me last year to succeed him, in this office, I experienced the natural human emotion of pride that you had so honored me. However, I felt rather overwhelmed with inadequacy and misgivings when confronted with the task. Needless to say, it is with the utmost sincerity that I express my heartfelt gratitude for the bestowal of this honor. I would like also, on behalf of the Society, to thank each officer and participating member for his unselfish and devoted effort during the past year.

It had become increasingly evident over a period of years that the Honolulu County Medical Society was so engulfed with complex problems that insufficient time was available for scientific discussions; consequently, the formation of the various special societies became a necessity, if the challenge to medical advancement was to be properly met. In accepting this challenge the Surgical Society has pledged itself to stimulate and propel the forward motion of surgery in Honolulu to approximate that in Mainland medical centers.

I have no desire to subject you to the agony of another retiring, or more appropriately tiring, address; but as it is customary in all medical organizations to terminate a presidency with an address, it is felt that an annual oration would be a worthwhile formal precedent to establish and it is to be hoped that this desirable obligation will be fulfilled by other presidents. Tradition has always been accepted as important in the formation of every new surgical society, and its preservation is important because it forms a nucleus for the development of character in a society.

I believe it is also customary at the termination of a service such as this to report or review briefly the important occurrences or salient events of the year. When I accepted the presidency last year, the important task of organization, stimulation of interest, and maintenance of attendance had already been consummated by Dr. Strode, the first President. Under his leadership and wise guidance, the primary objectives had been largely achieved.

I have tried to encourage and develop a certain amount of formality at each meeting by inviting the speaker to use this rostrum for his address, believing that it would lend dignity to the occasion. This Society believes that elocution is a poorly developed faculty in most physicians and these meetings offer ample opportunity for correcting this defect. Complimentary remarks have been passed out freely in an effort to further stimulate this worthwhile desire.

While the tangible accomplishments for the past year are not great, an earnest effort has been made in the field of improvement of surgical practice in this community. Some of the worthwhile undertakings that have received an initial impetus from this Society met with legal and other obstructive entanglements so that their accomplishment at the present is impossible. The animal experimental laboratory and the anatomical material for dissection will have to wait until a more appropriate time or until the depth of lay thinking is immeasurably increased. It is inconceivable that in a community as modern as ours there is such a prevalence of shortsighted, biased, and prejudiced thinking that valuable and life-saving projects are eliminated because of fear of political reprisal. From time immemorial animals have been sacrificed to replenish human protein stores, and this has been accepted as right and proper for the propagation and preservation of the human race. This same sacrifice for the acquisition of ornamental furs has also met with public approval; but oddly enough, transferral of this philosophy to the field of medicine has not received universal approbation. The sacrifice of animals for experimental purpose has met with strenuous and prolonged objection from certain powerful political sources. Are ornamental furs more important than

Presidential Address to the Honolulu Surgical Society, Nov. 18, 1949.

human lives? It is a sad commentary on our modern civilization. We will not accept this as a final answer but will classify it as a temporary annoyance.

We also endorsed and made appropriate recommendations to hospitals regarding the acquisition of trained physician - anesthesiologists and although this was not entirely successful, fruition will certainly come in the near future.

It has been very gratifying that the younger surgeons and trainees have accepted our earnest invitation to become active participants in the programs and some valuable papers were presented this past year by them. It is to be hoped that this will continue in the future. The inertia of approaching years and lethargy of a tropical climate may be partially nullified by the unbounding enthusiasm of youth.

The financial support to obtain Dr. Blalock was a most commendable action because it will bring to these shores a surgeon who is changing radically our concepts and surgical thinking by a fundamentally new approach, almost revolutionary in nature.

These are all concrete objectives, are easily apparent, and with which I believe we are all in accord.

There are other objectives that are not so apparent or discernible, but equally important. The desire to contribute to advancement and progress is a fundamental characteristic of most human beings, and this desire is exceptionally strong in surgeons. This Society not only has an unbridled opportunity for developing and cultivating this worthy desire, but also has an inherited obligation that cannot be evaded. We are all vaguely aware of this responsibility, but an attempt to reduce it to concrete and tangible proposals is somewhat difficult. I have spent considerable time in an attempt to reduce this amorphous obligation of the Surgical Society for surgical advancement to concrete proposals, which I would like to submit for your consideration tonight.

The first is that of surgical training of the neophyte. It is an obligation of this community to see that well-trained surgical replacements are continually available, and preferably from local resources. If we accept this statement as sound, then it behooves us to see that a satisfactory training period is available to worthy local aspirants. We should no longer depend upon the necessity of Mainland replacements for two good reasons: One is the residency law; and secondly, a natural desire and obligation to advance local talent.

The establishment and development of recognized residencies in surgery in these islands then becomes a Territorial obligation and must be consummated even to the extent of subsidization, provided it can be effected without the danger of political control.

I have wandered a little from my avowed subject as I intend to deal more specifically with training requisites, but I could not resist the temptation to introduce this important community asset.

Returning to the subject at hand: while the superiority of residency training program in surgery over the older preceptorship method might be subject to considerable controversy, no one can question the tremendous popularity of the former or its absolute necessity in meeting present certification requirements.

The second division of surgical training is the continued training of the surgeon throughout his active life. We are all aware of the fact that training of the surgeon does not end with the termination of the residency period, it is a perennial affair that is protracted to the extent that it is never completed. We can then consider the resident training period as only the introduction to many succeeding chapters if we are to avoid a static, stagnant and unproductive period that will inevitably follow. We are in a position to enumerate certain concrete proposals that in reality are attitudes or requisites that are necessary for the practice and development of good surgery. They are objectives that this Society unconsciously has accepted as worthy of fulfillment, rarely alluded to, or reduced to, a concrete state. The most important of these are enumerated below with a concise discussion of the more vital issues.

In attempting this, I am well aware of the possibility or likelihood of encroachment on the field of philosophy. I hope that this will be correctly interpreted as an honest and impassionate appeal for surgical improvement.

1. *Honesty, Surgical.* This has nothing to do with the usual interpretation of the meaning of honesty. We are what we are by nature of inheritance and training. Victor Hugo once correctly said that "To reform a man, you must begin with his grandmother." An attempt to reform a surgeon after years of improper training would be like locking the barn door after the horse had escaped. This has to do with intellectual honesty. Ignorance unwittingly breeds dishonesty. Honesty in surgery is not static because experience shows that operative procedures may prove fallacious. To illustrate this point with gastroenterostomy treatment of duodenal ulcer 30 years ago—today a surgeon might conceivably be accused of dis-

honesty in selecting this procedure because experience has revealed that the after effects are so undesirable as to exclude this form of treatment for general therapeutic usage. In other words to be precisely honest in surgery, one has to resort to a considerable amount of reading, evaluation of past experiences, self-examination, and a good healthy knowledge of physiology in addition to the strict interpretation of the moral sense of the word. An honest appraisal of errors and their correction constitutes good surgical behavior.

2. *Inquiring Mind.* This important philosophic indoctrination has been responsible for the tremendous surgical progress accomplished in the past decade. No one here tonight can dispute the fact that Lord Lister, John Hunter and Ambroise Paré are examples par excellence of this important attitude. We cannot help but extol the virtues of Andreas Vesalius in his refusal to blindly accept Galenic teachings. This marked the beginning of Renaissance in medicine that has not ended to this date.

3. *Humane Attitude.* We are all appreciative of the productive period of surgery, in which we are now living, that has been engendered by modern scientific developments. However, I believe it would be appropriate at this time to pause momentarily and reflect upon the decadence of the humane attitude in surgery. The decadence of this attitude has been wrought by the scientific fervor that has engulfed the medical thinking of today. We should never lose sight of the fact that we belong to the healing art, and our primary objective is to save and prolong life, restore function and relieve pain. In fulfilling this objective, kindness and compassion should be practiced at all times. This important phase of surgical training has been sadly neglected and one is impressed daily with the mechanical attitude and lack of the warm physician-patient relationship that was so characteristic of medicine in the past. It may well be that our present day zeal for scientific perfection has been over-emphasized to the extent that it is largely responsible for the insistent clamor for socialized medicine. At least we should not remain refractory to these portentous signs of warning.

4. *Selectivity of Patients and Therapeutic Methods.* It is ovious that a very careful assessment of operative risks and hazards must be weighed against an accurate appraisal of the expected result. Indiscriminate selection of patient or operative maneuver will result in undesirable and condemnatory public censorship.

5. *Discipline to a Certain Amount of Slavery in Surgery.* There is no short cut in surgery. One should early discipline himself to this irreconcilable fact. The glamour that attracts so many medical students is disappointingly submerged by the necessary acquisition of monotonous and tiring detail.

6. *Directness of Purpose.*

7. *Diurnal Constancy in Keeping Abreast of Surgical Literature.*

8. *Eternal Vigilance Against Careless and Slovenly Habits of Work and Thought.*

9. *Scientific Practicality.* A word of caution against the premature and overly enthusiastic acceptance of a new and untried therapeutic method. A careful appraisal and critical analysis of results reveal many undesirable periods of therapeutic upheaval and bitter illusions to both surgeon and patient.

10. *Creation of a Desire for the Dissemination and Preservation of Worthwhile Things in Surgery.* Every surgeon is a teacher and inherits this sacred obligation of passing on to each succeeding generation his knowledge and skill.

11. *Appreciation of the Historical Aspects and Character of Surgery.*

I hope that I have not subjected you to an unnecessary amount of boredom by cloaking this speech in too much idealism, because I know full well that a surgeon is more likely to be a Pragmatist than a Theorist or an Idealist. However, a certain amount of idealism is a good medium for culturing inspiration, a most valuable possession of the surgical aspirant or the accomplished surgeon.

No claim to originality is made in advancing the above philosophic concepts or attribute for the advancement of surgical training. It is a recapitulation of ideas expressed by surgical leaders devoted to the idea of Utopian surgery. If this Society is desirous of attaining surgical ascendancy or a state of visionary perfection, it is necessary that as individual members we develop surgical character. We should alert ourselves to the nefarious potentialities of static thinking and staunchly advocate the daily fulfillment of these above - named indespensable requisites. The achievement of this ideal state of exemplification necessitates constant application, perseverance, prodigious effort, verve, and an infinite amount of patience.

I would like to close with a quotation from an appropriate poem by Josiah Gilbert Holland:

> Heaven is not reached at a single bound;
> But we build the ladder by which we rise
> From the lowly earth to the vaulted skies,
> And we mount to its summit round by round.

Young Building.

Maternal Mortality in Honolulu Hospitals

Review for 1939-1948 at The Kapiolani Maternity and Gynecological Hospital

H. E. BOWLES, M.D., AND E. W. LUDWIG, M.D.
HONOLULU

SEVERAL articles have appeared in recent medical publications reviewing the factors which have contributed to decreasing fetal, neonatal and maternal mortality in many countries. Particular progress has been noted in the United States of America, but despite this fact, our maternal death rate can be still further decreased. In 1932, 63 out of 10,000 mothers in the United States died, as compared with 30 out of 10,000 in Italy and the Netherlands, 26 in Norway and 27 in Sweden. A recent article by Morton[1] brings out most clearly the improvements that have occurred in recent years in our country and shows maternal, fetal and neonatal statistics of California in a favorable light, as compared to those of many other states. In the 1943 tables listed by him, 12 states are ahead of California, Minnesota heading the list with 1.4 maternal deaths per 1,000 live births, as compared with the figure in California of 2.0 per 1,000 live births. Infant mortality in 1943 was 35.1 deaths per 1,000 live births in California, as compared with our national figure for the same year of 40.7. The article referred to gives an excellent summary as to how this phenomenal improvement has come about, and it is this article along with the reports of Davis and Gready[2] and of Potter and Dieckmann,[3] all of the Chicago Lying-In Hospital, which have prompted us here in Hawaii to make a comparable survey and report. We in Hawaii were encouraged by the comments and analysis of our medical situation by McCormick[4] who reported his observations to the Indianapolis Medical Society.

For a number of years, a resident training program has been in effect at The Kapiolani Maternity and Gynecological Hospital in Honolulu, on the island of Oahu. We have had an uphill struggle against many odds to improve our maternal, neonatal and fetal death rates and to establish and maintain a resident training program which would be a genuine credit to our specialty. We have been fortunate to come through the year 1948 without a maternal death in 3,292 deliveries and with no deaths on our gynecological service, which included 587 admissions. At present 5,138 (through May, 1949) consecutive deliveries have occurred without a maternal death.

McCormick[4] has listed the following main points as contributing factors in the favorable state of maternal and infant health in the Territory of Hawaii: (1) Climatic, with much of the time spent out-of-doors; (2) Hybrid population, possibly increasing hardiness; (3) A near 100 per cent prenatal supervision and hospital deliveries; (4) Compulsory consultation in all difficult cases; (5) Efficient functioning of medical health control throughout the islands.

For the sake of mainland readers, it will be well to take these factors in order and discuss them briefly.

(1) *Climatic.* Discussion will exclude those islands which lie under the administration of Hawaii but which are sparsely populated and are not an integral part of the Hawaiian chain, which lies directly west of the central portion of Mexico. Outstanding features are: the remarkable differences in rainfall over adjacent areas, due to topography; the high percentage of hours with sunshine over leeward lowlands and the persistent cloudiness over the nearby mountain peaks; the remarkably agreeable temperatures found day to day and the small differences in temperature between summer and winter months; the persistence of the trade winds; and the rarity of damaging storms of any kind. The annual average temperature at sea level is approximately 75° F.

Hawaii, the largest of the islands, has an extreme length of 93 miles and a width of 76 miles. It is relatively sparsely settled. The island of Oahu, on which Honolulu, the capital and largest city is located, is 44 miles long and 30 miles wide. The most recent census figures list the city of Honolulu to have a population of 277,129. Ap-

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From the Obstetrical Department of Kapiolani Maternity and Gynecological Hospital.

[1] Morton, D. G.: Maternal, Fetal, and Neonatal Mortality, California Medicine 65:18-21 (July) 1946.

[2] Davis, M. E. and Gready, T. G.: A Review of the Maternal Mortality at the Chicago Lying-In Hospital 1931-1945, Am. J. Obst. & Gynec. 51:492-513 (April) 1946.

[3] Potter, E. L. and Dieckmann, W. J.: Fetal and Infant Mortality for the Chicago Lying-In Hospital 1941-1946, Am. J. Obst. & Gynec. 56:593-597 (Sept.) 1948.

[4] McCormick, C. O.: Medicine et cetera in Hawaii, Indianapolis Med. Soc. Bull. 40:17-19 (Jan.) 1949.

proximately one-fourth of the Territory lies at elevations below 650 feet and most of the population lives below that level.

(2) *Hybrid Population.* The original Hawaiian stock, consisting of Polynesian migrants from Tahiti and Samoa, has virtually ceased to exist. Epidemics, to which the Oriental and Caucasian streams of population were relatively immune, affected the original Hawaiians as similar diseases did the American Indian. Waves of migrating peoples from Portugal and its dependencies, China, Japan, the Philippines, and to a lesser degree from the United States and various European nations, have resulted in a polyglot population which seems to be relatively hardy.

(3) *A Near 100 per cent Prenatal Supervision and Hospital Deliveries.* This is quite true at present, but it is very recently that it has come about. The Territorial Department of Health has for a good many years sponsored a number of charity or semi-charity prenatal and well-baby clinics which are directly under the supervision of independent practicing physicians who are specialists or who are recognized for their competence in obstetrics and gynecology or pediatrics. These men are paid a nominal fee by the Department of Health. Internes and residents under training in the various Honolulu hospitals together with nurses supplied by the Department of Health conduct the main work of the clinics. In rural districts in all the islands, plantation or rural privately practicing physicians direct and carry out the work with the help of Board of Health nurses. Midwife and home deliveries are at an all-time low. At present there are only 21 registered midwives in Hawaii. The following graph (Fig. 1) illustrates better than words the present status of midwife deliveries in the Territory of Hawaii.

For a number of years, such midwives as are practicing in the Territory have been under the supervision of the Department of Health and have received considerable instruction from supervising Department of Health nurses. The technique of those who are still practicing has shown marked improvement since this plan of close supervision was instituted. It is now a matter of course that an expectant mother will deliver in a hospital. It is more a question of which hospital she shall be delivered in and this depends upon place of residence and individual preference.

(4) *Compulsory Consultation in All Difficult Cases.* This rule is in effect in only one hospital, The Kapiolani Maternity and Gynecological Hospital. It applies to all obstetricians whether they are specialists or general practitioners. It is felt by the other hospitals in Honolulu that the consultation should come about by a sense of duty on the part of physicians rather than by compulsion.

(5) *The Efficient Functioning of Medical Health Control Throughout the Islands.* The work of the Territorial Department of Health has been referred to. The pineapple and sugar industries have maintained scattered hospitals which provide a good quality of medical care. For the most part, the mother having her baby in even the most remote plantation hospital receives commendable care. McCormick[4] mentions, also, that the teaching of the physiology of human reproduction and the importance of healthy parenthood has been included in the programs of the public high schools for many years. He feels that this is a strong contributing factor to the local health record.

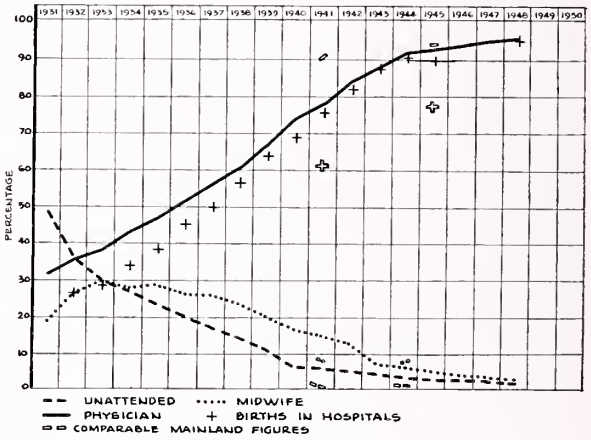


FIG. 1—Percent of births delivered by physicians and midwives, and unattended, in Hawaii, 1931-1948.

Maternal Mortality in The Kapiolani Hospital

The Kapiolani Maternity and Gynecological Hospital has just completed a year without a maternal death. Recently this hospital was listed as forty-third in a bulletin[5] giving the various hospitals of the United States in the order of the number of cases delivered in 1948. It is only recently that there has been a marked drop in the maternal, fetal and neonatal death rate. Several factors are, no doubt, involved: the organization of an efficient blood bank in Honolulu; compulsory consultation in all difficult maternity cases; an improved modern obstetrical suite; competent floor and delivery room nurses; improved anesthesia and resuscitation methods; and a modern system of resident training. Consultations are held frequently and freely in The Kapiolani Hospital and

[5] List of 50 Hospitals Having the Largest Number of Deliveries in 1947 as Officially Compiled by the American Medical Association, Bulletin of the Margaret Hague Hospital 1:3-4 (Sept.) 1948.

it is the exception rather than the rule to have to call the attention of the attending staff to the consultation ruling. At present there are 112 physicians who are permitted to deliver maternity cases in this hospital. In the first quarter of 1949, out of a total of 1,128 deliveries, 556 women were delivered by 18 specialists in obstetrics and gynecology and the remainder, or 572, were delivered by 72 physicians who were general practitioners. Many complicated obstetrical cases are sent in by midwives and by rural physicians to this hospital. In the ten-year period from 1939 to 1948, inclusive, there were 23,229 deliveries at The Kapiolani Hospital and 22 maternal deaths, or .094 per cent of the total. The graph in Figure 2 shows

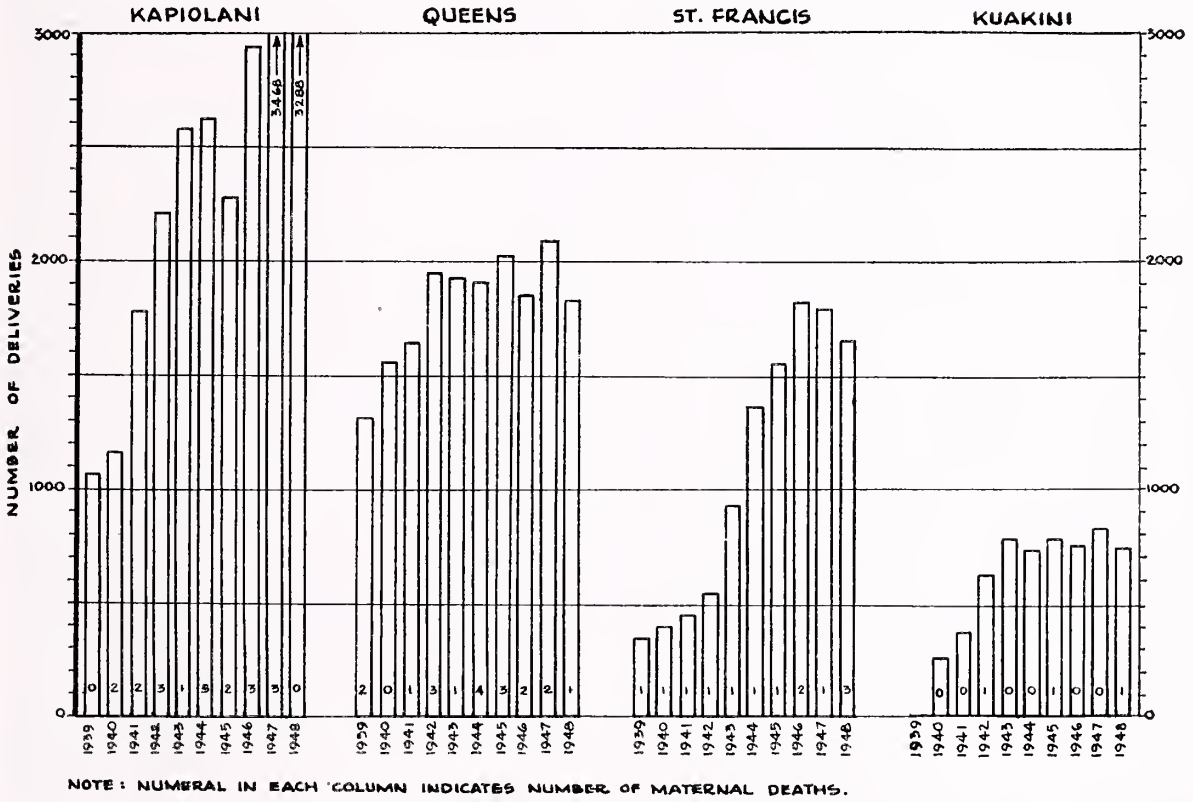


FIG. 2—Comparison of total deliveries and maternal deaths at principal Honolulu hospitals, 1939-1948.

comparative figures for The Kapiolani, The Queen's, St. Francis and Kuakini Hospitals, all in Honolulu.

These deaths were distributed as follows: Those due to hemorrhage and shock, 9; toxemia, 5; cesarean section, 4; infection, 2; ruptured uterus, 1; and heart disease, 1. It is felt that of these, 10 were not preventable and 12 were preventable when critically analyzed.

Hemorrhage and Shock

Only two deaths from hemorrhage and shock have occurred in the past three years. This we attribute directly to the availability of blood at all times. A supply of Type O, Rh negative blood is stored in the refrigerator in the delivery room suite and is available in a matter of seconds whenever there is no time for typing and cross-matching of blood. Boog[6] has recently published a detailed analysis of maternal deaths in the Territory of Hawaii. The graph in Figure 3 shows the trend of the Territorial mortality rate between the years 1930 and 1948.

Here as at The Kapiolani Maternity Hospital hemorrhage and shock head the list, and plans are under way to make blood readily available at every hospital. At The Kapiolani Maternity Hospital the use of high forceps is practically non-existent and difficult mid-plane forceps deliveries are rapidly giving way to one of the various types of low cervical cesarean section, extra- or trans-peritoneal, following an adequate trial or test of labor. Version and extraction, commonly a cause of uterine rupture with attendant hemorrhage and shock, is seldom performed except in properly evaluated cases. The intravenous use of an oxytocic as the anterior shoulder presents, according to the method of Davis or along similar lines, is widespread. In the past few months 3 hysterectomies

[6] Boog, J. M.: Maternal Mortality in Hawaii, HAWAII MED. J. 8: 267-272 (Mar.-Apr.) 1949.

have been performed for intractable postpartum hemorrhage. We feel that these women would surely have died a few years ago before the establishment of the Honolulu Blood Bank and its substations. As a rule we feel that a uterus once well packed to control bleeding should not be repacked but should be removed, if the initial packing does not check the hemorrhage.

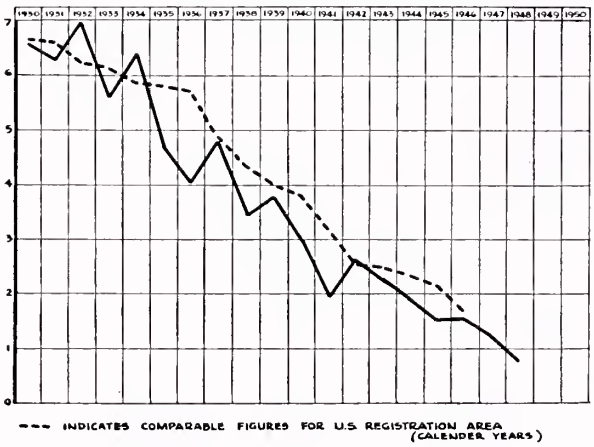


FIG. 3—Trend of maternal deaths per 1000 live births in Hawaii, 1930-1950.

It is our practice whenever moderate to severe ante- or intrapartum bleeding occurs to conduct a careful vaginal examination in a room reserved for caesarean sections. Direct inspection and palpation of the cervix is carried out, all arrangements having been previously made for section, packing, transfusion, etc. We are strongly of the opinion that fetal and maternal lives have been saved by adhering rigidly to this routine. Rectal examinations upon these bleeding patients are not permitted in the labor rooms.

Toxemia

Deaths due to this cause have shown a marked decline. A recent survey of eclampsia in Honolulu hospitals[7] places the incidence of true eclampsia at approximately 0.1 per cent of obstetrical admissions. The incidence is higher in rural areas. Improved antepartum care, especially as regards diet, has helped to decrease the number of deaths due to toxemia. Only one death has occurred from toxemia at The Kapiolani Hospital during the past three years; 5 patients died in 1939-1948. Better understanding of sodium and water balance, and the intelligent treating of the toxemic woman with proper sedation, elimination and with the aid of hypertonic solutions have reduced our mortality due to this cause. We do not employ cesarean section as a means of delivery in the toxemic mother unless there be obstetrical indications in addition.

Cesarean Section

In the years 1939-1948, 558 cesarean sections were performed at The Kapiolani Maternity Hospital out of 23,229 deliveries (2.4 per cent). Four of these patients died. The record on Case 1 of this series was too sketchy to permit of careful analysis but it seemed unpreventable. Case 2 died after a lengthy cesarean section, at which time the bladder was injured. We believe this was an avoidable death. In Case 3 the patient died in shock at the time a Porro section was done for Couvelaire uterus; the death seemed unpreventable. In Case 4, the patient went into shock during section, and it was impossible to start intravenous fluids and transfusion before her death due to collapsed veins. Since this last death, it is our policy to insert a needle and to commence intravenous fluids on all cases subjected to section unless there be some contraindication. Prior to this death, the practice of administering fluids intravenously during difficult deliveries and major surgical procedures was common but not universally adhered to as now. The fluids are started prior to the incision. In most instances where the patient has been previously sectioned, we resection here. There are some exceptions, as for instance when previous easy vaginal deliveries have occurred. In general, the policy is almost "once a section, always a section." Three uteri were seen recently at repeat section to have the membranes protruding through the old scars. One of these was a low cervical section, the other two had been sectioned by the classical method.

Extraperitoneal section, using the Cartwright-Waters technic or Norton's technic, is being employed often when the patient is potentially infected.

Infection

The trend for maternal deaths, due to puerperal or post-abortal infection, is sharply downward here in Hawaii, as in the mainland. Sulfonamides, followed by penicillin and streptomycin, have made the difference along with improved and more frequent blood transfusions and all the other factors. The various general causes for the decrease in maternal deaths are too well explained in the articles of Morton[1], and of Davis and Gready[2] to go into again. These same explanations apply in Honolulu. Here, until very recent years, a large group of physicians carrying on obstetrical practice did not feel it was necessary to remove one's street clothing. At present these

[7] Bowles, H. E.: Eclampsia and the Weather in Hawaii, HAWAII MED. J. 8:194-199 (Jan.-Feb.) 1949.

same men change into scrub suits and most of them even change their footwear! Fewer midwife and unattended deliveries and an almost 100 per cent of hospital deliveries have helped, together with improvement in prenatal care. Another contributing factor has been the tendency of such streptococcic infections as scarlet fever and erysipelas to run a comparatively mild course. It may be that puerperal infections naturally therefore tend toward a milder course regardless of all the factors noted.

Only 2 maternal deaths due to infection occurred at The Kapiolani Hospital in the ten-year period from 1939 to 1948. One of these was a case of ruptured tubal pregnancy with accompanying generalized peritonitis, and occurred before the era of penicillin. The other was in a young Hawaiian-Caucasian multipara who left the hospital on the fourth postpartum day against medical advice. She had coitus immediately on reaching home and was re-admitted with a high fever on the eighth day after delivery. Despite heroic treatment with sulfonamides, penicillin and streptomycin, she died of purulent peritonitis. The offending organism was never isolated. Another multipara with chronic hypertension complicated by toxemia of late pregnancy contracted virulent uterine sepsis following artificial rupture of the membranes for the induction of labor in the eighth month of pregnancy. She recovered spectacularly following Porro section and the removal of a uterus containing a dead fetus and a huge amount of pus. The operation was carried out only when the patient's condition became progressively worse despite massive doses of antibiotics. We are certain she also would have died without the hysterectomy and we are inclined to think hysterectomy would have saved the girl who developed the sepsis following coitus on the fourth postpartum day. It was a noteworthy feature that there have been no deaths due to septic abortions in this hospital in the ten-year period.

Ruptured Uterus

One death occurred in the ten-year period directly traceable to uterine rupture following manual dilatation of the cervix in the eighth month of gestation in a toxemic patient. Three repeat sections were done on uteri at or near term with membranes protruding through the old uterine scar. These have been discussed under the paragraph on sections. Lacerations of the cervix occurred following other podalic versions, fortunately, however, without fatal results for the mother. The formidable procedure of podalic version has been discussed in preceding paragraphs. Fewer of them are being done here now.

Heart Disease

Only one death occurred at this hospital in the ten-year period in an 18 year old Filipina in early acute cardiac failure at eight months. This patient avoided prenatal care and was seen only when already decompensated. She had mitral disease apparently originally due to rheumatic heart disease. In Hawaii, as in the mainland U.S.A. and Canada, we have the definite entity of rheumatic heart disease, though the joint manifestations of the disease are not often seen. Studies of heart disease in Hawaii by Lam and Hartwell[8], and by Berk and Hartwell[9] show that the incidence of various types of heart disease is much the same as is seen on the mainland. The high incidence of syphilitic heart disease in the Hawaiian is noteworthy as it is in the negroes of the southern U.S.A.

Anesthesia

No deaths were attributable to anesthesia during this time. At present, most of the women in labor receive divided doses of demerol and scopolamine and are delivered with the aid of nitrous oxide, cyclopropane, ether, local infiltration with novocaine, spinal anesthesia with 50 milligrams of novocaine, or "saddle block" type of spinal anesthesia using heavy nupercaine. There has been a marked drop in the incidence of cesarean sections under general anesthesia. Spinal anesthesia, or local infiltration with novocaine, are the usual preference. Where the spinal method is used, novocaine is usually given. The dose in the past has been 100 mg. for the most part, but of late there has been a gratifying trend toward scaling this dosage down to 75 mg. There is an increasing tendency to use the fractional method of continuous spinal anesthesia. This is particularly true of extra-peritoneal sections but is being applied with increasing frequency to other types of sections. Caudal anesthesia is held in reserve as a rule for cardiac patients where we wish to remove all effort on the patient's part. Metycaine is in common use for this method. A few years ago, several cesarean sections were successfully carried out under it. At times it was necessary to add local infiltration. When supplementary anesthesia is needed, for instance when the spinal anesthesia wears off after extraction of the fetus, light cyclopropane anesthesia, or a small amount of sodium pentothal are often used. It is felt that the administration of oxygen inhalation to the

[8] Lam, J. W. and Hartwell, A. S.: Heart Disease in Hawaii, HAWAII MED. J. 3:71-74 (Nov.-Dec.) 1943.

[9] Berk, M. D. and Hartwell, A. S.: Five Years of Heart Disease in Hawaii, HAWAII MED. J. 8:177-180 (Jan.-Feb.) 1949.

mother and the use of small doses of spinal anesthesia for manipulative vaginal deliveries has saved many babies or at any rate has cut to an all time low the incidence of asphyxia in babies. The constant high humidity seems to be a valuable safeguard against cyclopropane explosions in Hawaii.

Embolism

No embolic deaths occurred during the recent span of ten years. Thrombophlebitis of the leg occurred twice. In one case the treatment was surgical. In the other case the thrombus was too extensive, and the treatment carried out was conservative.

Both cases recovered. In general the incidence of thrombophlebitis in Hawaii is very low. We feel that early ambulation in maternity cases as well as in operative gynecological cases may be an added factor. Most of our cases, whether normal deliveries or sections, and most of our gynecological major cases are up and about to some extent in twenty-four to forty-eight hours after delivery or surgery.

Transfusion Reactions

No deaths occurred in The Kapiolani Hospital from this cause. These reactions are seldom seen. Since the establishment of the Honolulu Blood Bank in 1941, blood has been readily available at all times. Rhesus factor determinations are routine with most prenatal patients. In those cases where utmost speed is required in administering blood, Rh negative, Type O blood is given. Whenever possible, typing, cross-matching and Rh factor determinations are carried out.

Conclusions

Maternal mortality figures for The Kapiolani Maternity and Gynecological Hospital, Honolulu, are reviewed for the span of ten years, 1939-1948. The figures are compared with those of the United States in general, and of some foreign countries as well as those of the other Honolulu hospitals maintaining regular maternity departments. During this period, there were 22 maternal deaths out of a total of 23,229 deliveries (.094%). It is our feeling that 12 of these could have been prevented. There were no maternal deaths at The Kapiolani Hospital in the 3,288 deliveries in 1948.

Addendum

At the time of this writing (May 1, 1950), there has been one maternal death in the last 9,444 consecutive deliveries. This death occurred two weeks postpartum, following the administration of Presidon, a new sedative which has since been withdrawn from the market due to its dangerous properties. Fatal agranulocytosis resulted from its use. It is questionable whether this should really be listed as a maternal death. At present a similar critical analysis of fetal and neonatal deaths for a comparable period is under way.

881 So. Hotel Street.
Kapiolani Hospital.

A Poi Agar Medium for the Isolation and Cultivation of Tubercle Bacilli

Studies in the Bacteriology of Poi, IV[1]

O. A. BUSHNELL, B.S., M.S., Ph.D., AND EDWIN T. ICHIRIU, B.A., M.S.
HONOLULU

THE excellence of poi in the human diet and in the nutrition of the many kinds of microorganisms which make up its natural flora have long since been established. It came as no surprise to us, then, during the course of our studies on the survival-time of tubercle bacilli in souring poi,[2] to learn that sterilized sweet poi can support profuse and rapid growth of virulent tubercle bacilli as well as of other species of Mycobacterium.

With this observation to encourage further interest, we attempted to devise a medium containing poi as a base and agar as a solidifying agent which might be useful in the diagnostic laboratory for the initial isolation of tubercle bacilli from clinical specimens. The expense, labor, and difficulty involved in making the traditional media for the cultivation of tubercle bacilli (like Petragnani's, or Petroff's, or Löwenstein's media, all of which contain native proteins that must be coagulated by inspissation), or even in making Dubos and Middlebrook's variants of their media containing Tween 80, are notorious, at least among those who must prepare these media for use; and we realized, from our own dismaying experience, that any medium which could be made easily, inexpensively, and fresh; which could use agar as a solidifying agent, and which, therefore, could be sterilized in an autoclave like any ordinary medium; and which, of course, could also grow tubercle bacilli quickly and well, would be answering a great need among medical technicians.

We believe that we have found such a medium. With poi as its base, the medium was relatively easy to devise; for if poi alone, with some water and some agar added to it, could grow the tubercle bacilli well, almost anything that was added to enrich it succeeded in growing them better.

Methods

The many details of the experimentation are hardly worthy of recording. It should be sufficient to say that, because poi is deficient in nitrogenous constituents (Miller[3]; Bilger and Young[4]) the value of adding a variety of nitrogen-containing compounds to a poi-agar base was studied, to determine their effect upon the speed and the amount of growth of 12 different test strains of Mycobacterium species. The effects of certain mineral salts, of Tween 80, and of the addition of an inhibiting agent, malachite green (which is often added to the traditional media to repress the growth of possible contaminants), were also studied. Different dilutions of the test strains of tubercle bacilli were also prepared to provide inocula ranging from very many tubercle bacilli to very few, in order to determine the effect of numbers upon speed of growth. All variants of the culture medium were dispensed in one-ounce prescription bottles provided with bakelite screw-caps, and were sterilized in the autoclave at 15 pounds pressure for 15 minutes. They were inoculated within twenty-four hours of preparation, in most instances by direct transfer of visible inoculum from stock cultures of the test strains. When the studies were first begun these test strains were maintained on Petragnani's medium, but later they were grown on a simple poi-and-agar medium, to which no other ingredients were added. Cultures were incubated at 37° C. for at least 8 weeks, and were examined frequently during the course of the incubation.

The nitrogenous substances studied were chosen from among those usually found in the bacteriological laboratory: asparagine, beef, brain-heart infusion, casein ("according to Dr. T. B. Osborne"), casitone, peptone, proteose-peptone No. 3, tryptone, tryptose, veal, and yeast extract. All of these except the casein are Difco products. Of the 12 test cultures used, 10 were strains of Mycobacterium tuberculosis recently isolated (on Petragnani's medium) from tuberculous patients; the two other cultures were obtained from the American Type Culture Collection, Washington, D.C.,

[1] This investigation was supported in part by a research grant from the Division of Research Grants and Fellowships of the National Institute of Health, United States Public Health Service. Manuscript received December 23, 1949.

[2] Ichiriu, E. T. and Bushnell, O. A. The survival-time of Mycobacterium tuberculosis in poi. Studies in the Bacteriology of Poi, II. HAWAII MEDICAL JOURNAL 9:163 (Jan.-Feb.) 1950.

[3] Miller, C. D.: Food Values of Poi, Taro, and Limu, Bernice P. Bishop Museum Bull. 37:5, 1927.

[4] Bilger, L. N. and Young, H. Y.: A Chemical Investigation of the Fermentations Occurring in the Process of Poi Manufacture, Jour. Agr. Research 51:45 (Jan.) 1935.

one being a strain of M. avium and the other a strain of M. smegmatis.

Results and Discussion

All of the nitrogenous compounds that were tested improved the poi-agar base to some extent, but five of them — asparagine, brain-heart infusion, casitone, peptone, and tryptone—were superior to the others. Because brain-heart infusion consistently appeared to favor better growth of the greatest number of the strains of tubercle bacilli, and because asparagine seemed to favor the growth of some of the strains, it was decided to use both of these ingredients in the final formula of the medium. With the addition of glycerine and of the mineral salts that experience indicated were favorable, the medium as it is now prepared has this formula:

Poi (fresh or canned) mixed in a Waring blendor with tap water, in proportions of 1 part of poi to 4 parts of water.
Bacto-agar, 2%
Glycerine, 4%.
Bacto-brain-heart infusion, 0.5%.
Bacto-asparagine, 0.1%.
Magnesium sulfate, trace.
Potassium dihydrogen phosphate, trace.
Ferric ammonium citrate, trace.
Malachite green, 0.04 ml. of a 2% solution per 100 ml. of medium.*
Tween 80, 0.05 to 0.10%.*

The mixture is brought to a boil to dissolve the agar and to achieve the characteristic initial acidification of the poi. Then, after it is cooled to about 50° C., its reaction is adjusted to pH 7.2–7.4, preferably by electrometric methods (although colorimetric methods can also be used), using 10% NaOH as the reagent base.

The adjusted medium is then dispensed in tubes or in screw-capped prescription bottles, and is sterilized by autoclaving at 15 pounds' pressure for 15 minutes. It can be slanted at once if it is to be used soon, or it can be stored unslanted until just before it is needed, when, of course, fresh slants can be prepared after melting it in boiling water. (As is the case with all media, this medium gives best results when it is used fresh.) When it is solidified, the medium has a slightly purple color (because of the litmus-like indicator in the taro from which the poi is prepared), and offers a background of color and opacity against which growth of Mycobacterium organisms can be detected readily.

In our hands this medium gave excellent results: it grew the test strains of the tubercle bacilli, even when very small inocula were used, producing typical tan-colored, dry, wrinkled, friable colonies in from 10 to 20 days, depending upon the strain employed and upon the number of organisms in the inoculum. In most of the cultures growth was apparent even sooner, but required this period in which to develop into colonies which were recognizably those of tubercle bacilli. When the inocula were heavy, visible growth was achieved rapidly, and developed into a heaped-up profusion of large colonies. In all cases, as the colonies aged, they became deeper in color, progressing from the characteristic sand color through golden to orange and, in some cases, to brown. Microscopic examination of smears prepared from the younger tan-colored colonies and stained by Ziehl-Neelsen's technic showed a variety of pleomorphic forms, ranging from the coccobacillary to the slender bacillary forms considered to be "typical" of the tubercle bacilli.

As might be expected, the test strains of M. avium and M. smegmatis (which have been maintained for a long time on artificial media) grew very well on the poi agar medium, achieving rank growth in less than thirty-six hours, and exhibiting even more pronounced changes in color, as the colonies aged, than did the tubercle bacilli.

The fact that poi itself contributes some valuable factor to the medium was easily demonstrated by preparing the formula without the poi. On this poi-less medium M. avium and M. smegmatis grew well enough (but not as well as they did in the presence of poi); but the 10 strains of tubercle bacilli grew only moderately well, noticeably less profusely and notably slower than they did in parallel cultures inoculated at the same time upon the complete medium. When this test of the poi-less medium was performed, the test strains of tubercle bacilli had been growing upon artificial media for at least 6 months. It is not possible for us to determine just what factor the poi does contribute to the medium: it may be that the mere physical presence of its starch is all that it has to offer, and that this starch acts to absorb and to minimize the effect of toxic ions found in the other ingredients of the medium, as starch is said to help the growth of gonococci and of meningococci in media containing certain brands of agar and certain toxic amino acids; or, it may be that the poi actually offers foodstuffs or accessory growth factors which are available to the tubercle bacilli and which act to enhance their growth.

The influence of malachite green upon the ability of certain strains of tubercle bacilli to grow was astonishing. These studies showed that different strains of tubercle bacilli vary considerably in their sensitivity to malachite green: some strains grew quite well in the variants of poi agar to which different concentrations of malachite green had been added, and others did not grow at all, even when only very small amounts of malachite green were used. Very small amounts of bromthymol - blue indicator (dibromothymolsulfonephthalein) were also toxic for tubercle bacilli, and in these studies inhibited all of the test strains when the indicator was incorporated in the medium. No doubt these are observations that have

* Optional; see discussion.

been made many times before, but they cannot be called too urgently to the attention of laboratory technicians who are accustomed to using malachite green with an unmeasured lavishness, for, if they persist in this error, they can succeed only in inhibiting all organisms transplanted to their virid media, even the tubercle bacilli which they seek.

These results with malachite green led to the conclusion that a medium which contains no inhibiting agent would be better, as far as growing the tubercle bacilli is concerned, than one which does contain an inhibitor. For this reason, then, the poi agar medium is recommended for use without malachite green, in the belief that the additional time and precautions demanded in properly preparing specimens for cultivation will be rewarded with a greater number of positive cultures of tubercle bacilli. Nonetheless, for the sake of those technicians who habitually add contaminants to their cultures—and our attempts to gain clinical trial of this poi medium have shown that there is a disconcerting number of contaminants present in most specimens prepared for cultivation on Petragnani's medium (although these contaminants are usually inhibited by the bacteriostatic dyestuff present in the medium)—the regretful compromise is inevitable: if malachite green *must* be added, it should be added in very small amounts, and it should be added by pipette, not "by eye": 0.02 ml. of a 2% solution of malachite green added to each 100 ml. of medium is sufficient to inhibit most, if not all, of the likely contaminants, at the same time permitting even small numbers of most strains of tubercle bacilli to grow. On the medium to which malachite green is added the tubercle bacilli will grow more slowly and sparsely than they will on the medium to which no malachite green is added; nonetheless, in speed and degree of growth it supports, the poi medium containing malachite green is still comparable with Petragnani's or Löwenstein's media containing malachite green.

Tween 80 can be added to the poi agar without any apparent ill effect upon the tubercle bacilli. When it was used in concentrations of 0.05 to 0.1% it seemed to hasten slightly the growth of tubercle bacilli, but its presence in the medium also has a tendency to cause the organisms to develop smooth, raised, moist colonies instead of the familiar rough, dry colonies the medical bacteriologist expects to find. For this reason Tween 80 is best left out of the medium, to save the overburdened technician the need to worry about the identity of the unfamiliar smooth colonies that might develop if it were present.

The poi-agar medium has been tested for its practicability in several of the clinical laboratories in Honolulu, and in some of them it seemed to be able to serve its purpose by growing the tubercle bacilli just as well as any of the other media employed for diagnostic purposes. Its chief disadvantage, according to the complaint of its users, is the ease with which it will grow contaminants when malachite green is not present in it. This is an accusation that reflects as much upon the technician as upon the medium—and, of course, is one that could be applied to all of the traditional media if malachite green were left out of them—but it refers to a fault which we feel can be overcome by the laboratory technician when the clinical specimen is being prepared for cultivation. With a little experience, or simply with more attention to the details of effective digestion of specimens, contamination can be eliminated. Our experience with it has been encouraging, and suggests that, if only because of its simplicity in preparation, this medium has a place in the clinical laboratory. We commend it for further trial by medical technicians interested in it.

Summary

A medium made up of diluted poi, certain mineral salts, asparagine, glycerine, brain-heart infusion, and agar has been devised for use in the cultivation and isolation of tubercle bacilli (as well as of other species of Mycobacterium). The medium can be prepared quickly and inexpensively, using either fresh or canned poi. Because it contains agar as the solidifying agent, it can be autoclaved like most of the ordinary bacteriological media. On this substrate tubercle bacilli grow as quickly and as well as they do in any of the more complex traditional media, producing colonies and individual cells with the characteristics which bacteriologists consider as diagnostic. A bacteriostatic agent like malachite green to inhibit contaminants, and Tween 80, may also be added to the medium if they are wanted.

Acknowledgments

We are indebted to bacteriologists and technicians in several laboratories in Honolulu, particularly at Leahi Hospital, The Queen's Hospital, St. Francis Hospital, and Tripler General Hospital, and we should like to thank them for their help. Their interest—and their need for some such medium as this poi agar—has been the chief stimulus to these investigations. We should like to acknowledge also the contributions in criticism and encouragement of Dr. Max Levine, Director, Bureau of Laboratories, Territorial Department of Health, Honolulu, and the great technical assistance of Miss Mitsuno Fukuda, Department of Bacteriology, University of Hawaii, Honolulu.

Department of Bacteriology, University of Hawaii.

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[EDITORIALS]

LEPROSY IN HAWAII IN 1950

Norman R. Sloan *et al.* and Edwin K. Chung-Hoon summarize, elsewhere in this issue, two different aspects of leprosy in Hawaii today. The sum and substance of their two reports is that leprosy is being gradually eradicated from the Territory, but by a process of gradual attrition which may easily require another half century for its completion.

The report of Sloan and his associates, read a year ago before the Territorial Medical Association and delayed in publication partly in order to permit simultaneous publication in the *International Journal of Leprosy,* summarizes the results of three years of treatment with sulfones in 346 patients. They are good, though slow. Progression is slight and infrequent once treatment is begun. Tuberculoid as well as lepromatous cases appear to be helped by treatment. Mortality among leprous patients has been reduced from 9.3 to 5.9 per cent.

Chung-Hoon's report reviews and analyzes the past ten years' experience with some 320 new cases of leprosy. It is noteworthy that his paper, written a year after Sloan's, is entitled "Hansen's Disease in Hawaii," in keeping with the preference of the Board of Health for avoidance of the word "leprosy." It is not apparent that there is any very decided downward trend in the incidence of new cases, but perhaps such a trend is concealed by the recent increase in the proportion of cases of less than one year's duration. The effects of earlier diagnosis and sulfone therapy are reflected, perhaps, in the near-doubling of the proportion of cases discharged from the Board's custody, from 12 per cent in the 1939-44 period, to 22 per cent in the 1944-49 one.

The ratio of male cases to female cases was 1.6 to 1 in Dr. Chung-Hoon's series, and 1.58 to 1 in Dr. Sloan's, an interesting confirmation of a long-recognized tendency for leprosy to affect more men than women. This preference is more marked among lepromatous cases, apparently, than among tuberculoid, the ratios in these two types being 1.7:1 and 1.1:1 respectively.

The error of expecting to find leprosy bacilli in every case is clearly shown by Dr. Chung-Hoon's figures: 82 per cent of the tuberculoid cases, and 85 per cent of the indeterminate ones, were bacteriologically negative when the diagnosis was made.

The supposition that prolonged and intimate contact with leprosy is necessary for infection finds little support in the fact that roughly two-thirds of the new cases knew of no previous contact with the disease. Dr. Chung-Hoon properly points out that many of these may have had contact during infancy and childhood, without realizing it; nevertheless, the possibility that infection may occur as a result of relatively brief and casual contact is clearly raised by these figures.

We in Hawaii may take particular pride in four of Dr. Chung-Hoon's figures. First, nearly 80 per cent of the new cases are picked up by practicing physicians, not by leprologists, public health experts, or institutional workers. This is partly due to the fact that intensive surveys have been impractical during the study period, but it shows

that doctors here are alert to the diagnosis of leprosy. Second, 78 per cent of all cases giving a history of duration of symptoms had had their symptoms for less than a year at the time they were diagnosed, and this figure has risen from 73 to 82 per cent during the second half of the study period. Third, nearly half of all new cases are bacteriologically negative when diagnosed; during the latter half of the period, 45 per cent were tuberculoid in type. This means not only alertness in diagnosis, but a trend toward relatively better resistance of the population as a whole. Fourth, and finally, during a period when about 320 cases were added to the rolls, 454 were removed, reducing our total census of leprous patients by 134 cases in the ten-year period.

We've been doing a pretty good job on leprosy in Hawaii, and here are the figures to prove it!

H.L.A.

DO YOU NEED A LABORATORY TECHNICIAN IN JULY?

The University of Hawaii in affiliation with four general hospitals in the Territory provides an accepted and recognized course of training in Medical Technology.

As early as 1939 there had been correspondence between Dean A. R. Keller of the University, and the Technician's Registry of the American Society of Clinical Pathologists, relative to the establishment of a course of training in Medical Technology in Hawaii. No real progress was made, however, until 1943 when, at the instigation of Dr. Paul S. Bachman, Dean of Faculties of the University, and Dean A. R. Keller of the College of Applied Sciences, a meeting was arranged with Dr. Eric A. Fennel, Dr. Bernard Witlin (then in charge of the Laboratories of the Board of Health), Dr. O. N. Allen, Dr. Leonora N. Bilger and Dr. Christopher J. Hamre, at which time a curriculum was discussed. Other meetings followed which resulted in the adoption of a course of training, the first three years of which were to be spent at the University of Hawaii, and the fourth or interne year in certain medical laboratories, following which a Bachelor of Science degree was to be awarded by the University.

This curriculum was adopted in 1944 and the first two students were graduated the following year. In 1946 five students finished this course and were given degrees; one graduated in 1947, one in 1948, five in 1949; and eleven will finish in June, 1950. The fourth practical year was spent in the laboratories of The Queen's Hospital, St. Francis Hospital, Kuakini Hospital, The Clinic and the Board of Health.

Dr. E. A. Fennel was appointed pathologist in charge of the fourth year of training and held this position until the beginning of the current academic year 1949-1950, when he was succeeded by Dr. I. L. Tilden. Dr. Sumner Price aided the program materially by assisting in placing the eleven students for the academic year of 1949-1950.

A qualified medical technologist was appointed by the University to give the students instruction during their fourth practical year. Mrs. Donald Adams first held this post; she was succeeded by Mrs. Mary Kendall of The Queen's Hospital, and she in turn by Miss Grace Oishi who was appointed for the current year of 1949-1950.

In 1949 the Council on Medical Education and Hospitals of the American Medical Association approved four general hospitals in the Territory —The Queen's, St. Francis, Kuakini and Tripler hospitals—as maintaining proper standards for the training of laboratory technicians, and the eleven 1949-1950 students were placed in the above mentioned hospitals, one at Queen's, two at Kuakini, two at St. Francis and six at Tripler. These students will receive their Bachelor of Science degree in June from the University and will then be eligible for the Registry examinations given by the American Society of Clinical Pathologists. Most of them will at that time be looking for jobs, and local physicians and hospitals are urged to give preference to these local young men and women who have received their training right here in Hawaii.

The training program outlined above is superior to the courses offered by some approved schools in the mainland United States, chiefly because of the three academic years which are spent at the University. To date no graduate has failed in the Registry Examinations given by the American Society of Clinical Pathologists, and many of them have passed in the upper third of all applicants taking the examinations. A number of graduates have had no trouble finding positions in the mainland United States and so far as I know all have done well. A recent student who completed her fourth year at St. Francis Hospital went to Dr. I. Davidsohn's laboratory at Mount Sinai Hospital in Chicago where she is already in charge of the tissue laboratory. All physicians and hospitals are urged to give this worthwhile course of training their continued support.

I. L. Tilden, M.D.

TOURAINE'S APHTHOSIS[1]

"There is a fearsome dermatological jungle in which various diseases with resounding eponymous titles struggle for life. They are the chronic erosive conditions affecting the eyes, mouth, and genitalia. Each specialist is naturally absorbed in his own field, which for him takes precedence of all others, and so a number of syndromes have arisen, such as Sutton's (1911) 'periadenitis mucosae necrotica recurrens,' Loblowitz's (1910) 'ulcus neuroticum oris et vulvae,' Lipshütz's (1923) 'acute vulval ulcer,' 'pustulo-ulcerous balanitis,' and others. Behcet (1937, 1940), a Turkish dermatologist, described a triple symptom-complex in which all three areas — eyes, mouth, and genitalia—are affected simultaneously or in sequence. Little round or oval ulcers with yellow sloughs succeed one another in the mouth, vulva, or glans penis, associated with inflammation of the cornea, conjunctivitis, or sclera. The skin has a tendency to develop acneiform pustules or deep-seated lesions of the erythema nodosum type.

"In 1941 Touraine made an extensive study of this whole group. He suggests that the various conditions belong to one single systemic disease, which he ascribes to an ultravirus, and to which he gives the name 'aphthosis.' He thinks that this agent, like the virus of herpes simplex, becomes established in the body and manifests itself clinically when for divers reasons the individual becomes anergic. Touraine divides his aphthosis into three groups according to severity and extent.

1. A generalized form, affecting the skin, mucosae, and joints. This is severe and starts with fever and general systemic disturbance.
2. A milder form, involving the mouth and genitalia, with a few scattered vesico-pustules on the skin.
3. Aphthosis of the mucosae alone, in the form of small recurrent ulcers, or, less often, a single large ulcerative area, which may be mistaken for a venereal infection. There is much variety in the severity and duration of the ulcers, and also in the length of the free periods. Recurrences may be precipitated by any bodily upset, such as infectious fevers or pregnancy, or by local trauma or operative procedure.

"Touraine's view is substantially in accord with Whitwell's (1934) conception of 'embolic showers' causing necrotic aphthae in mucosae and skin. It may be that future research will show the conception of 'aphthosis' to have over-simplified the problem. But until further knowledge is obtained the harassed dermatologist can only feel relief at having so many odd sheep neatly penned into one fold."

[1] Carleton, Alice: Vesico-bullous Diseases Affecting the Eye, Brit. M.J. 1:835 (Oct. 15) 1949.

DOCTORS ARE CITIZENS

What are you doing for your community, in return for its supporting you in the practice of medicine? Just paying taxes? That isn't enough. You have to do that much, so you can hardly expect credit for it.

It's a fundamental rule that a system gives out no more than is put into it, and that goes for a community just as much as it does for a mechanical device. If the medical profession is to be well treated by the body politic, it must be well thought of by the people; if it is to be well thought of, it must do well by them—not merely the normal stint of practicing good medicine and paying taxes, but sharing in community responsibilities and helping to bear community burdens.

How much you do may be dependent on a lot of factors: what time you can spare from your practice and your golf, how well you can get along in group activities, how lazy you are, and so on. Perhaps a minimum of effort would be for you to register, and to vote in every election. With a little more sacrifice of your time, say an evening every month or two, you could participate in the affairs of your community organization or your political precinct club, or both. At moderate cost, you could support either the Junior or Senior Chamber of Commerce, and with another small investment of spare time, you could work on one of the committees. You might even attend an occasional monthly meeting of your own medical society!

Community cooperation of this sort is important; it is the very life blood of successful public relations. When medical problems arise in relation to legislation, doctors will be asked their opinion about them, and listened to, only in proportion as they have proved themselves good citizens, interested in helping their fellow-men with *their* problems.

Are you doing your share? If not, now's a good time to start!

MEDICAL NEWS

At last an explanation for the failure of vitamin K to control **hemorrhage due to dicumarol:** Miller, R., et al. (*New Eng. J. Med.* 242:211 [Feb. 9] 1950) have shown that the water soluble vitamin K preparations (Hykinone, Synkayvite and menadione) are *completely inert* in neutralizing the effect of dicumarol.

The experiments were carried out in rats, dogs, and human volunteers. Doses up to 1000 mg. were given by mouth and by vein to dicumarolized subjects without effect.

In contrast, the **oil-soluble vitamin K** preparations (vitamin K_1 and vitamin K_1 oxide) were uniformly and quickly effective. For intravenous use, they were dissolved in alcohol and added to 500 cc. of 5 per cent glucose solution, forming a fine colloidal suspension.

* * *

Judging from the literature, this must be "Down-with-Rheumatoid-Arthritis" year.

While waiting for ACTH and Cortisone (which may never prove to be of lasting clinical usefulness) Americans are investigating **postpartum plasma.** Jaundice and pregnancy have long been known to produce remissions in **rheumatoid arthritis.** Little practical use has been made of these facts, since the production of jaundice in human beings is hazardous, and "therapeutic pregnancy" can be applied only in a few courses of nine months each. Transfusion with blood from pregnant women has been disappointing.

Granirer (*Science* 111:204 [Feb. 24] 1950) now reports that postpartum plasma given to patients with rheumatoid arthritis produces remissions lasting from three to sixteen weeks, characterized by disappearance of joint symptoms, weight gain, and restoration to normal of the microcytic anemia and albumin-globulin ratio. The postpartum plasma had an unusual opalescent green tint, and contained remarkably low concentrations of protein (average 4.3 gm. per cent, with an A/G ratio of only 0.9).

* * *

Davison and friends found that **intramuscular pregnenolone-in-oil** produced remissions in 11 of 13 patients with **rheumatoid arthritis,** but (as with ACTH and Cortisone) relapses were prompt after discontinuance of the injections. (*Arch. Int. Med.* 85:365 [Mar.] 1950.)

* * *

(Some) Britons are still convinced that **DOCA plus C** (desoxycorticosterone acetate, intramuscularly, plus ascorbic acid intravenously) is definitely worthwhile. Le Vay and Laxton (*Lancet* 1:209 [Feb. 4] 1950) report good results in the majority of 80 patients with **rheumatoid arthritis.** They further claim this treatment produces remarkable relief of pain, swelling and stiffness in fractures and sprains.

* * *

Another Briton reports that **tetra-ethylammonium bromide** (Etamon) relieved joint pains 45 out of the 55 times it was tried in a group of 26 **rheumatoid arthritics.** The injection was given intramuscularly (5 cc.) and relief lasted from 5 to 210 days. (Howell, T. H., *Lancet* 1:204 [Feb. 4] 1950.)

* * *

And Frenchmen are recommending copper salts. **Cupralene** and **Dicuprene** were found by Forestier, et al., (*Stanford Med. Bull.* 8:12 [Feb.] 1950) to be useful in patients who have had reactions to gold. Fifty-nine patients were treated, and (the usual) 50 per cent improved.

* * *

It is almost with relief that we read of something being tried in the treatment of **rheumatoid arthritis** and turning out *not* to be "remarkable," "miraculous," or "fantastically good." Alexander and Duthie (*Lancet* 1:297 [Feb. 18] 1950) tried **progesterone** in huge doses (100 to 200 mg. in oil intramuscularly daily) in 5 patients and decided it was no darn good.

* * *

The New England Medical Center has found **Perazil,** a new Burroughs-Wellcome product, to be the most generally useful **antihistaminic.** Animal studies show it to be far and away the least toxic antihistaminic available. (Brown, E. A., et al., *Ann. Allergy* 8:32 [Jan.-Feb.] 1950.)

C. A. Domzalski, Jr., M.D.

PSYCHIATRIC COMMENT

THE SODIUM AMYTAL INTERVIEW

The sodium amytal interview is a relatively new psychiatric modality now widely used in the diagnosis and treatment of various mental disorders. It has proven its value as a well-defined diagnostic procedure, which in conjunction with other diagnostic methods at our disposal may be instrumental in clarifying the diagnosis in doubtful cases. The sodium amytal interview is also used as a method of prognostication, and above all, it has established itself as a definite therapeutic procedure in certain types of psychoneuroses and borderline psychoses.

The effectiveness of narcosis in revealing buried and forgotten memories and repressed conflicts has been recognized by physicians throughout the ages. It is practically as old as the use of alcohol in the human race. The old adage *"in vino veritas"* is expressive of the theme that gave rise to the fascinating idea of a truth-revealing drug. Anesthetists long have remarked that patients may reveal personal material of a very intimate nature and expose unknown facets of their personality during the induction phases of anesthesia.

The modern offspring of this old idea began in 1931 when the Englishman Stephen Horsley observed that patients under the influence of nembutal and other barbiturates were able to converse freely and to talk frankly about matters of a very personal nature. He also noticed that on the following day those patients had no recollection of what they had said or done under the influence of the drug. He continued his experiments and observations and this finally led to the development of a new modality which Horsley called narcoanalysis; that is, an analysis of the patient's mental content, his problems and his conflicts during a state of superficial narcosis or subnarcosis produced by the administration of the drug. It is primarily due to the action of the narcotics as cortical depressants, whereby inhibitions are removed and a temporary reduction of reticence, reserve, anxiety or fear sets in.

It has been suggested by some authors that the action of some of the barbiturates differs from that of a pure cortical depressant, and that these drugs have an additional specific action on the hypothalamic region. Such an action would account for the peculiar hypnosis-like effect and for the altered emotional state produced by a relatively small dose of those drugs. In the course of time, two compounds proved to be particularly effective and relatively harmless for clinical use—sodium amytal and sodium pentothal. Our experience has been primarily with sodium amytal, which differs only very slightly from sodium pentothal.

The technique of the sodium amytal interview is rather simple. We dilute 15 grains (1 gram) of sodium amytal in 30 cc. of distilled water for intravenous use. We use a small-gauge intravenous needle to make sure that the drug is administered at a very slow rate, not more than one grain per minute. The average patient will require somewhere between 5 and 12 grains of sodium amytal for a successful completion of the interview; that is, the injection of this amount should be spread over a period of 10 to 15 minutes. It is advisable to do it in a quiet, dimly lit room, conducive to relaxation and good rapport between doctor and patient. It is essential to have 7½ grains of caffeine sodium benzoate ready in a hypodermic syringe for immediate use in case of untoward reaction or too deep a narcosis, for a rapid termination of the narcotic effect. However, if a proper technique and slow rate is applied there is rarely any need for the injection except to be kept in reserve as an emergency procedure.

To give the patient the greatest benefit of the sodium amytal interview, it is of great importance for the psychiatrist to be acquainted with the patient's history, record, and his traumatic experiences, whenever possible. Such a knowledge will greatly facilitate the remembering and re-living under sodium amytal of the emotional experiences which might have a direct bearing on the patient's mental condition. During the administration of the drug, it is well to begin with neutral topics regarding the past life of the patient and to work up gradually towards the pathogenic experiences or happenings which preceded the development of the amnesia or anxiety, or the conversion syndrome. Once the patient is able to transfer himself mentally, so to speak, into the setting in which his symptoms originated, he may be able under proper questioning to recall painful and forgotten memories, to experience the emotional impact associated with those happenings that has been kept in abeyance, and eventually undergo an emotional catharsis leading up to his recovery. If this method does not strike a response, it is advisable

to systematically explore the immediate situation and complaints, trying to trace their origins and their relationships to the patient's illness. Another helpful procedure is to stimulate the recall of dreams and recent fantasies.

Such material can be discussed later on with the patient on a conscious level, their meaning and significance can be interpreted, thus making it possible for the patient to gain insight into the nature of those experiences, realize the causes and the mechanisms of his mental aberrations, and eventually make him face the original psychic traumata and resolve his conflicts with the expert assistance of the psychiatrist. I am referring here to the process of psychotherapy to follow a series of sodium amytal interviews in a neurotic patient.

Instead of employing the protracted and time-consuming process of psychoanalysis, it is possible at times to get at the root of the trouble, to uncover the causative complexes and the etiologic factors in a relatively short time with the use of a drug which helps to tear down the barriers of inhibition and overcome resistances. This in brief is the method of narcotherapy which may follow the process of narcoanalysis.

Some of the more common and effective applications of the sodium amytal interview are:

1. The recovery of forgotten or repressed material will often help to fill in gaps in the patient's history, which may prove of great value to the understanding of the psychopathology and the dynamics of the case, and greatly facilitate an exact diagnosis and appropriate therapy.
2. In some cases of schizophrenia, it is possible to uncover under sodium amytal delusions and hallucinations which could not be elicited in the course of a psychiatric interview on a conscious level, thus confirming the diagnosis in doubtful cases and differentiating it from psychoneurotic disorders.
3. Mute and inaccessible patients may converse freely under sodium amytal and give the psychiatrist for the first time access to the patient's thinking, feelings and mental content.
4. Episodes of amnesia may fully clear under sodium amytal, providing the psychiatrist with vital clues for a diagnostic and therapeutic evaluation of those disorders.
5. Faking and malingering may often be fully proven and stripped of its superficial veneer under the influence of a sub-narcotic interview.

This list I would like to follow up with the enumeration of some therapeutic indications for a sodium amytal interview. It is obvious that states of acute excitement, panics and rage-reactions will respond to the administration of a barbiturate and often give the patient immediate relief. The interview carried on under the influence of the drug may shed very important light on the causes of the panic or anxiety, and become the foundation for a long range therapeutic program. Perhaps the greatest use of this method was made during the war as a first-aid measure in treating acute war neuroses in the field. Craig and Horsley in England, Menninger, Grinker, Ebaugh and many others in this country have stressed the effectiveness of sodium amytal as a powerful first-aid agent in the treatment of acute war neuroses, like states of anxiety, combat fatigue, amnesias, or acute conversion syndromes, like paralysis, hysterical blindness, etc. During the last war, it has been recognized that the responsibility for providing immediate treatment for the battle neurotics in a forward war area rests with the regimental medical officer, and that he should have a reasonably simple method at his disposal for dealing quickly with acute nervous disorders. The drug-analytic method of sodium amytal and sodium pentothal administration is such a method.

Its greatest asset, however, lies in the use of the sodium amytal interview in the treatment of selected cases of psychoneurosis, chronic anxiety, phobias, obsessive compulsive states and conversion-hysteria. Narcotherapy is often a reliable shortcut in relieving and eventually curing a great many of these patients. When time is of the essence or when an elaborate psychoanalytical treatment cannot be carried out, the psychiatrist will resort to the use of the sodium amytal interview. Such a treatment may require 20 to 30 interviews, given at the rate of 2 or 3 a week, offering the patient and the psychiatrist an excellent chance to uncover the primal psychic traumata and the mental mechanisms that produced the symptoms and help the patient to abreact the pathogenic experiences with a fair chance of ultimate recovery.

In our experience, this form of therapy is also valuable in the treatment of the chronic alcoholic or drug addict whose addiction is primarily a neurotic escape pattern, designed to relieve his anxieties and feelings of inadequacy and to substitute vicarious gratifications for the normal and natural joys of life. The sodium amytal interviews may often provide us with essential clues to the understanding of the causative factors and personality structure of the chronic alcoholic without which successful therapy is almost unthinkable.

The sodium amytal interview has also a very definite place as an auxiliary measure in the treatment of properly selected patients suffering from the more serious psychotic disorders. If used selectively and judiciously and if properly integrated with other therapies at our disposal, the sodium amytal interview may substantially contribute towards a better and faster recovery.

MARCUS GUENSBERG, M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 293rd regular meeting of the Hawaii County Medical Society was a dinner-meeting held at the Lanai on Thursday evening, February 16, 1950. Members present were: Doctors Bergin, Bernstein, Carter, M. H. Chang, Crawford, Cunningham, Depp, Fernandez, Haraguchi, Hayashi, Kasamoto, Loo, Matsumura, Miyamoto, Mizuire, Okumoto, Orenstein, Oto, Seymour, Tomoguchi, and Yuen. Guests were Dr. Bowles of Honolulu and Dr. Joseph L. Baer, the speaker of the evening.

The treasurer, Dr. Haraguchi, reminded the members that some of them had not yet paid their assessment for the refrigerator given to the Hawaii Blood Bank by the Society.

Dr. Orenstein stated that Dr. Irwin was definitely out as Medical Director of HMSA and that Doctors Faus, Meister and H. M. Patterson had applied for this position. It was moved by Dr. Carter, seconded by Dr. Loo, and unanimously approved that the secretary be instructed to write to the HMSA and state that this Society goes on record as endorsing Dr. Patterson as Medical Director of HMSA.

The treasurer, Dr. Haraguchi, informed the members of the AMA dues of $25.00. Dr. Crawford informed the society that the Territorial Medical Society will distribute standard forms to the secretaries of each County Society to be sent out with the bills for the AMA dues. The forms are already available and will be sent out soon. Dr. Henry Yuen informed the members that this dues of $25.00 is not deductible as an income tax item. [This is incorrect. It is deductible.—ED.]

Dr. Bowles of The Clinic in Honolulu was introduced to the members.

Dr. Joseph L. Baer of Chicago, Professor Emeritus of Obstetrics and Gynecology at Rush, Chicago, spoke on "The Practice of Medicine" and elaborated especially on his observations and impressions as regards his practice of obstetrics. An active period of discussion followed his talk and the meeting adjourned at 10:45 p. m.

* * *

The annual meeting, the 294th regular meeting of the Hawaii County Medical Society, was held on March 18, 1950 at the Izumoto Tea House. The president, Dr. George Tomoguchi, was host to a delicious chicken-hekka dinner given to the membership. Prior to the dinner and in the afternoon, a golf tournament was held at the Hilo Country Club and Dr. Henry Yuen served as chairman of this event. Dinner was started at 7 p.m. and the business meeting was called to order at 8:30 p.m. by the president.

Members present: Drs. Bergin, Bernstein, Brown, M. H. Chang, M. L. Chang, Chock, Crawford, Fernandez, Haraguchi, Kasamoto, Kurashige, Leslie, Matsumura, Miyamoto, Mizuire, Okada, Okumoto, Orenstein, Oto, Judd (temporarily taking the practice of Dr. Phillips), Milford, Seymour, Tomoguchi, Woo, Yamanoha, and Yuen.

Doctors Judd and Milford were both introduced to the membership by the president.

A letter from Mrs. Frank Spencer, president of the Woman's Auxiliary to the Hawaii Territorial Medical Association, was read. Mrs. Spencer expressed a desire to meet with the Hawaii County Medical Society and their wives for the purpose of explaining and clarifying some of the advantages of the Woman's Auxiliary of the Hawaii County Medical Society affiliating with the Territorial and National Chapters. After a lengthy discussion, it was moved by Dr. Leslie, seconded by Dr. Fernandez and unanimously approved that the secretary be instructed to communicate with Mrs. Spencer and inform her that the matter of the local auxiliary's affiliation or non-affiliation with the Territorial and National chapters was a matter for the local auxiliary to decide.

A letter from the secretary of the Nurses' Association of the County of Hawaii explaining fund-raising plans to enable sending a delegate to the biennial Nurses' Convention to be held in San Francisco the week of May 8 was read. It was unanimously agreed upon by the membership present to give every aid to the Nurses' Association in their plans.

Dr. Crawford presented a report of the Library Committee of which he is the chairman; he also presented a financial report and requested a budget of $500.00 for the year 1950-1951. It was moved by Dr. Yuen, seconded by Dr. M. H. Chang, and unanimously approved that the report of the Library Committee be accepted.

The report of the Polio Committee by Dr. Bernstein was unanimously accepted on the motion of Dr. Yuen and second by Dr. Oto.

The report of the Mental Hygiene Committee by Dr. Bernstein was unanimously accepted on the motion of Dr. Yuen, seconded by Dr. Oto.

The Treasurer's report was unanimously accepted on motion of Dr. Yuen, seconded by Dr. Oto.

The Nominating Committee presented the following nominations for officers of the Hawaii County Medical Society for the year 1950-1951:

President	**Dr. Leo Bernstein**
Vice-President	**Dr. T. D. Woo**
Secretary	**Dr. Pete Okumoto**
Treasurer	**Dr. M. L. Chang**
Delegates	**Dr. Walter Seymour**
	Dr. T. D. Woo
Alternate Delegates	**Dr. Henry Yuen**
	Dr. William Bergin

It was moved by Dr. Bergin, seconded by Dr. Haraguchi, and voted to close the nominations and the secretary instructed to cast a unanimous ballot.

This annual meeting being the 25th and Silver Anniversary of the Hawaii County Medical Society, Dr. Crawford spoke in behalf of the members and presented to the three charter members still in active practice and members of this Society, sterling silver ash-trays with appropriate engravings. Drs. Brown and Orenstein

were present and accepted the presentations. The third charter member, Dr. Carter, was unable to attend this meeting.

The meeting was then turned over to the incoming president, Dr. Leo Bernstein. It was moved by Dr. Crawford, seconded by Dr. Woo and unanimously approved that the society extend a vote of thanks for the work accomplished by the outgoing president, Dr. George Tomoguchi.

The remainder of the meeting was turned over to the Entertainment Committee headed by Dr. Yuen, who first presented the prizes given for those participating in the Golf Tournament earlier that afternoon. After this, the evening was turned over for more entertainment. The business portion of the meeting was adjourned at 9:15 p.m.

ROBERT M. MIYAMOTO, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The March meeting of the Society was held on the first Friday in the Mabel Smyth Building. Dr. Arnold, Jr., presided; about 98 members and guests were present. A colored movie, "Injection Treatment," by Dr. H. I. Biegeleisen, Chief, Sclero-Therapy Clinic, Stuyvesant Polyclinic, New York City, was shown. The principal talk of the evening was entitled "The Problem of Restoration of Continuity after Resection of Carcinoma of the Rectum," by Dr. Damon B. Pfeiffer, Abington, Penn. It was followed by a paper entitled "Antabus Therapy—Preliminary Report," by Dr. J. Robert Jacobson.

The following anuouncements were made. Elected into membership at the last Board of Governors meeting were: Regular Members—Dr. Edward C. Wo Lum, Dr. Randal Nishijima and Dr. Laurence G. Thouin; Associate Members—Commander Calvin T. Doudna, MC, USN; 1st Lt. Harry Lee, MC, AUS; Capt. Richard L. Wenzel, MC, AUS; Dr. James G. Marnie and Dr. William B. Meister.

The Convalescent Nursing Home is running into a deficit because of lack of patients. Members were urged to send patients needing that type of care to the Home.

Dr. Robert Faus has been selected as the Medical Director of HMSA.

At the last Board of Governors meeting, question was raised with regard to the residency requirement of the Medical Practice Act. A letter is on file from the Attorney General explaining that "residence" is interpreted as domiciliary and not physical residence. If the members so desire the statute could be amended to require that a person have "physically resided in the Territory with intent to make it his home" for a year.

Also in the same letter was the matter of citizenship requirement. The opinion holds that our citizenship requirement for medical licensure is unconstitutional.

Dr. C. A. Domzalski was elected by closed ballot at the last Board meeting to represent Honolulu to participate in a training course in atomic warfare defense.

Members were urged to send in their checks for AMA dues.

It has been called to our attention that there are many errors in the new telephone directory with regard to physicians' listings. Members were asked to report these errors so that a letter could be written to the telephone company.

The following amendment was presented to be voted upon. As provided in the By-Laws, the amendment was read at the meeting of February 3 and circulated to the general membership:

> Chapter V, Section 8. Fee Adjustment Committee: This committee shall consist of six (6) members who shall be elected for terms of three (3) years each. Two shall be elected each year. At least one member of this committee must be a general practitioner. A chairman shall be elected annually by the committee members.
>
> It shall be the duty of this committee, subject to the approval of the membership, to formulate, negotiate, and annually review and periodically revise all contractual fee schedules, and to establish appropriate fees, when requested by conflicting parties, or by Society members, in cases where contractual fees are dependent on the magnitude of the procedure performed.

ACTION: It was moved, seconded and passed that the amendment be made in the By-Laws, as presented.

The Society has been invited to participate in the Oahu Health Council. It was felt by the members of the Board of Governors at its last meeting that this matter should be presented to the membership. Dr. F. J. Pinkerton discussed the classes of membership and dues for each; also the activities of the Oahu Health Council and how the money is to be spent. Dr. Yee stated that in an organization such as the Oahu Health Council, where all phases of public health activities of different agencies are correlated, the medical profession should play the major role. Dr. Wilbar felt that it is very worthwhile for the Society to be active in guiding the Oahu Health Council. A lengthy discussion followed.

ACTION: Dr. Devereux moved that the Society contribute $250.00 to the Oahu Health Council. Motion was seconded by Dr. Fronk.

Dr. Walsh explained that the budget for the year 1950-1951 had already been approved and no provision had been made for such expenditures. Dr. Arnold ruled the motion out of order.

ACTION: Dr. Li moved that $250.00 be given to the Oahu Health Council for Supporting Membership and that that amount be taken out of the general reserve fund. Motion was seconded.

ACTION: Dr. Walsh amended Dr. Li's motion to the effect that $501.00 be given to the Oahu Health Council for Sustaining Membership. Motion was seconded and carried by a vote of 46 to 3.

Dr. Teruo Yoshina, one of the representatives of the Society on the Professional Advisory Committee of the Honolulu Chapter, National Foundation of Infantile Paralysis, stated that he and Dr. Tyau were appointed to serve on a subcommittee to recommend with the approval of the County Society, a panel of physicians, one from each specialty, who may be called upon for diagnosis and consultation and treatment of a case of polio which is under the financial assistance of the Foundation. A set fee will be determined jointly by the Foundation and the Medical Society and payable to the physician. This panel will also act as a court of appeal for final judgment on grievances which may arise between private physicians and the Foundation.

Discussion followed and the following action was taken:

ACTION: Dr. Yoshina moved that the panel be selected by each specialty society and recommend to the County Society for approval and also that fees collected for services be turned over to the HCMS to be spent and enjoyed by all members of the Society in some worthwhile purpose such as postgraduate lectures, library use, etc. Motion was seconded and carried by a majority vote.

The annual meeting of the Society was held on March 31, 1950, at 7:15 p.m. in the Mabel Smyth Auditorium. Dr. Arnold, Jr., presided; about 130 members and guests were present. A colored movie, *Allergy and Immunology*. by Dr. Leo H. Criep, Chief of Allergy and Associate Professor of Medicine, University of Pittsburgh, was shown.

The president announced that tonight's meeting will be designated as the "April Meeting" to keep in accord with the requirements of the By-Laws which state that election of officers will he held at the April meeting.

Reports of Officers and Committee Chairmen: The following reports were presented and accepted:

Program Committee—**Dr. William S. Ito** (Schedule A)
Grievance Committee—**Dr. H. S. Dickson** (Schedule B) read by president
Committee on Forms of Medical Practice—**Dr. F. J. Halford** (Schedule C)
Fee Adjustment Committee—**Dr. R. T. West** (Schedule D)
Representatives to Hawaii Medical Service Association—**Dr. Lyle G. Phillips** (Schedule E)
Public Service Committee—**Dr. Richard C. Durant** (Schedule F)
Preparedness Committee—**Dr. R. B. Faus** (Schedule G)
Postgraduate Education Committee—**Dr. A. S. Hartwell** (Schedule H)
Treasurer and Budget Committee—**Dr. Wm. Walsh** (Schedule I)
Secretary's Report—**Dr. John Wm. Devereux** (Schedule J)
Library Committee—**Dr. R. G. Hunter** (Schedule K)
Library Board of Governors—**Dr. R. B. Cloward** (Schedule L) (Report accepted without being read)
President's Address—**Dr. Harry L. Arnold, Jr.** (Schedule M)

Election of Officers: The president offered the names for the various offices submitted by the Nominating Committee. Adequate opportunity was given for nominations from the floor. On motion of Dr. Allison, duly seconded and carried, the secretary was instructed to cast a unanimous ballot for those positions for which there was no competition. Election was by written ballot with the following elected:

Officers
President—**Dr. Samuel L. Yee**
Vice-President—**Dr. John Wm. Devereux**
Secretary—**Dr. William Walsh**
Treasurer—**Dr. William Ito**
Board of Governors
For two years:
Dr. Toru Nishigayo
Dr. Radney T. West
Dr. Richard K. C. Lee
Dr. Edward F. Cushnie
For one year:
Dr. Marton E. Berk
Alternate Board of Governors
For one year:
Dr. Isaac Kawasoki
Dr. A. L. Vascancellos
Dr. C. A. Domzalski
Board of Censors
For three years:
Dr. Grover A. Batten
Committee on Forms of Medical Practice
For five years:
Dr. Harry L. Arnold, Jr.
Delegates to Hawaii Territorial Medical Association
For two years:
Dr. P. S. Arthur
Dr. F. D. Nance
Dr. Raymond Uyeno
Dr. Richord Chun
Dr. David Katsuki
Dr. David Pang
Dr. Kenneth Amlin
For one year:
Dr. John M. Felix
Alternate Delegates to the Territorial Association
For two years:
Dr. John Kometani
Dr. Lester Yee
Dr. Richard Dadge
Dr. John Frazer
Dr. Marquis Stevens
Dr. Walter Herter
Dr. Horold Moffat
For one year:
Dr. Verne C. Waite
Dr. Robert Benson
Dr. Abrahom Ng-Kamsat
Representatives to Hawaii Medical Service Association
For two years:
Dr. William Walsh
Dr. Lyle G. Phillips
Dr. Homer Izumi
Fee Adjustment Committee
For three years:
Dr. Thomas Fujiwara
Dr. Ogden Pinkerton
For two years:
Dr. Thomas Richert
Dr. T. Alon Cosey

Since this was a joint annual meeting of the Honolulu County Medical Society and the Honolulu County Medical Library, the Library also presented its nominations at this time. The election was carried out by written ballot with the following results:

Library Board of Governors
For two years:
Dr. E. R. Austin
Dr. Thomos F. Fujiwara
Dr. Clifford Kobayashi
Dr. Duke Cho Choy

On suggestion of Dr. Halford, election of the president, 1st vice-president and 2nd vice-president will be left to the Board of Governors of the Library as the office of president entails some legal complications.

Dr. Phillips announced that Dr. Arnold, Jr., was appointed chairman of the Public Health Committee of the Chamber of Commerce and Dr. R. C. Durant elected a member of the Board of Directors of the Chamber.

Members were urged to attend the Hawaii Territorial Medical Association Annual Meeting, which will be held in Hilo May 4 to 7, and to send in their reservations.

Meeting was adjourned after a brief message from the new president.

WM. M. WALSH, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held in the library of the Wilcox Memorial Hospital on February 8, 1950, at 7:30 p.m. Presiding over the meeting was President Masunaga. Members present were Drs.: Wallis, Ishii, Bieber, Wade, Cockett, Kuhns, Masunaga, Fujii, and guests, Drs. Guensberg, Kuhlman and Steuerman.

The meeting opened with Dr. Guensberg presenting a picture of therapy on screen from the Territorial Hospital.

Dr. Ishii, member of the cancer committee, announced that money is now available for cancer patients who cannot pay for services and treatments.

A letter from the Hawaii Heart Association was read regarding the embarkment of a project in the assisting of physicians in the Territory for the care of heart diseases. The members unanimously approved of the project and agreed that the secretary of the Society give the decision to Dr. Arnold through telephone.

Dr. Lynn's letter regarding expenditures on Dr. Guensberg's visit to Kauai be drawn from the Mental Health Fund was read. Dr. Cockett moved that we draw from the fund to pay for Dr. Guensberg's trip.

A letter from Dr. Richert about a position open for a Medical Director in the HMSA with a salary of $300 was read.

Dr. Kuninobu's letter to the Society notified the members of Drs. Paul White's and Alfred Blalock's trip to the Territory and that both doctors will be available on Kauai on May 10 and 17 of this year. It was agreed upon to have both doctors over in Kauai on two sepa-

ate dates—one on the 10th and the other on the 17th, whichever is convenient for both doctors.

Membership dues of $25 due to the AMA in a letter from the Hawaii Territorial Medical Association was read.

With no further business to be discussed the meeting adjourned at 9:45 p.m.

* * *

The regular meeting of the Kauai County Medical Society was held at 7:35 p.m. on Wednesday, March 8, 1950, at the Wilcox Memorial Hospital library. Members present were Drs.: Wallis, Kemp, Chisholm, Kuhns, Bieber, Goodhue, Fujii, Masunaga, Boyden, Cockett, Brennecke, and Wade. Guests were Dr. Lynn, Dr. Steuerman, and Chief Crowell.

Prior to the opening of the regular meeting, Dr. Sam Wallis opened a discussion on drunk driving. Suggestions voiced were the following:

1. When a patient is brought in under the influence of liquor, the examining physician should not be the patient's own doctor. The patient should be taken to and examined by a physician other than his own.
2. Who is responsible for the bills on the cases that the Police bring?

At 8:15 moving pictures on the following were shown:

1. Malnutrition in Hospital Patients.
2. Endotracheal Anesthesia.
3. Pudendal Block.

At 9:25 the regular meeting opened with Dr. Masunaga presiding.

Dr. Wallis moved that we give $7.50 to the Hawaii Visitors Bureau. Dr. Fujii seconded. The motion carried.

Dr. Wallis reported on the Board meeting of the HMSA. Board proposed to have an actuary to find out how to put the HMSA on sound basis. Dr. Cockett made a motion on the proposal and it was seconded by Dr. Goodhue. The motion carried.

Dr. Wallis moved that the names of officers nominated into office by the nominating committee be accepted. The motion was seconded by Dr. Bieber and carried.

K. K. FUJII, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The meeting was opened by Dr. Underwood at 6:30 p.m., March 21, in the Maui Grand Hotel.

The Board of Governors met with Sen. Anzai and Rep. Ezell last month to discuss the formation of an Advisory Group to the Committee on Hospitals, Medical Care, Health and Warfare. The following have been appointed by Dr. Underwood: John Sanders, M.D. (Chairman); Katsumi Izumi, M.D.; Harold Kushi, M.D.; Edward Kushi, M.D.; Edmund Tompkins, M.D.; William Toney, M.D.; William Wilkinson, M.D.; J. I. Reppun, M.D.; Frank St. Sure, M.D.; S. Miura, D.D.S.; and Elizabeth Sheridan, R.N.

Dr. Joseph Molloy of Molokai paid his Initiation Fee and Dues and was duly admitted to regular membership as of January 17, 1950.

Dr. Harry Arnold Senior's request for the institution of Heart Disease Clinics on Maui was brought up again and discussed at great length as to the need of such clinics, the availability of both fluoroscope and EKG at the same place, and the cost to the Heart Association. A motion to approve the formation of such clinics was defeated.

Dr. Thomas Mar's application for membership by transfer from Honolulu County Society was read. His dues in the Honolulu Society have been paid to February 28, 1950.

ACTION: Dr. Mar was elected to membership contingent upon the receipt of the sum of $12.50 which will pay his Maui County dues to June 30, 1950.

The secretary-treasurer was authorized to purchase and present a $25.00 Savings Bond to Mrs. Violet French in appreciation of services she has rendered our Society by mimeographing our Minutes.

Dr. Cole discussed the coming Cancer Campaign and the request of the Cancer Society to have local physicians present at the talks to be given by **Dr. Quisenberry.** Individual physicians have volunteered to cover these meetings.

The secretary was instructed to write a letter to Mr. Gene Sheffield thanking him for the dinner he gave the members of the Maui County Medical Society on behalf of the Prudential Insurance Company.

Dr. Rockett stated that a Blood Bank will probably be formed at Malulani Hospital with the assistance of the Honolulu Blood Bank and that since the donors will consist of many people outside of Wailuku, it would be proper for other Maui Hospitals to use this Bank in emergencies.

Dr. William Osmers of Wailuku (Honorary Member) died on March 17, 1950. The secretary sent a floral offering. **Dr. Frank St. Sure** was delegated to write an obituary for the HAWAII MEDICAL JOURNAL and a letter of condolence to Mrs. Osmers from the Maui County Medical Society.

Annual Elections:

a. The Nominating Committee submitted the following nominations:

President—**Dr. Cole**
Secretary-Treasurer—**Dr. Shimokawa**
Vice-President—**Dr. Edward Kushi**

Since there were no additional nominations from the floor, it was moved by Dr. Sanders and seconded by Dr. Fleming that the secretary cast a unanimous ballot in favor of the above candidates. Passed unanimously.

b. **Drs. Fleming** and **St. Sure** were unanimously elected as Delegates. Meeting adjourned at 9:30 p.m.

Committee Appointments for 1950-1951

Medical Disaster Committee—**Dr. Underwood,** Chairman, **Drs. McArthur, Tompkins, Toney, Burden** and **Mar.**
Medical Economics and Public Relations Council—**Dr. McArthur,** Chairman, **Drs. Patterson, Shimakawa, Kashiwa** and **Burden.**
Program Committee—**Dr. Rockett,** Chairman, **Drs. Ohata** and **Haywood.**
First Aid for County Fair—**Dr. Patterson.**
First Aid for Fourth of July—**Dr. Ohata.**
Publicity—**Dr. Shimokawa.**
Representative to Maui Chapter, Hawaii Cancer Society—**Dr. Ferkany.**
Consultants to Cancer Committee — **Dr. Ferkany,** Chairman, **Drs. Haywood** and **Tofukuji.**
Blood Bank—**Dr. Rockett,** Chairman, **Drs. Kashiwa, A. Y. Wong, Haywood, Jim** and **S. K. Wong.**
Advisory Group to Legislature Holdover Committee on Hospitals, Medical Care, Health and Welfare—**Dr. Sanders,** Chairman, **Drs. K. Izumi, Tompkins, Toney, Wilkinson, Reppun, St. Sure, H. Kushi** and **E. Kushi. (Dr. Miura** is the representative from the Dental Society and **Miss Elizabeth Sheridan** from the Nurses' Association.)
Nominating Committee—**Dr. Kanda,** Chairman, **Drs. Underwood** and **Burden.**
Grievance Committee—**Dr. Patterson,** Chairman, **Drs. Shimakawa** and **Kanda.**
Annual Picnic—**Drs. Sanders** and **Fleming.**
Advisors to Women's Auxiliary—**Drs. Rockett** and **McArthur.**

ROBERT F. COLE, M.D.
Secretary.

THE HONOLULU COUNTY MEDICAL LIBRARY

MRS. ETHEL HILL, *Librarian*
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Closed all day and evening on National holidays and at noon on Territorial holidays.

RECENT ACQUISITIONS

Allergy

Cleveland Clinic Staff. *Allergy in clinical practice.* c1941. (gift of Dr. Van Poole.)

Vaughan, W. T. *Primer of allergy.* 3rd ed. rev. 1946.

Cardiology and Cardiography

Burch, George. *A primer of electrocardiography.* c1945. (gift of Dr. deHay.)

Sigler, L. H. *Cardiovascular disease.* c1949. (gift of publisher.)

Wolff, Louis. *Electrocardiography.* c1950. (gift of publisher.)

Dermatology

Semon, H. C. G. *An atlas of the commoner skin diseases.* 2nd ed. c1939. (gift of Dr. Van Poole.)

Ophthalmology

Atkinson, D. T. *External diseases of the eye.* c1934. (gift of Dr. Van Poole.)

Chance, Burton. *Ophthalmology.* c1939. (gift of Dr. Van Poole.)

Duke-Elder, W. S. *Textbook of ophthalmology.* v.1. 1933. (gift of Dr. Van Poole.)

Jackson, Chevalier. *Bronchoscopy, esophagoscopy and gastroscopy.* 3rd ed. c1934. (gift of Dr. Van Poole.)

Krause, A. C. *The biochemistry of the eye.* c1934. (gift of Dr. Van Poole.)

Snell, A. C. *A treatise on medicolegal ophthal-mology.* c1940. (gift of Dr. Van Poole.)

West China Union University. *Collected reprints of the Department of Ophthalmology,* 1938 to 1945. (gift of Dr. Van Poole.)

Surgery

Cantor, M. O. *Intestinal intubation.* c1949. (gift of publisher.)

Kirschner, Martin. *Operative surgery.* v.3. c1937. (gift of Dr. Van Poole.)

Tropical Medicine

Cox, L. B. *Human torulosis.* 1946.

Great Britain, Army Med. Dept. *Memoranda on medical diseases in tropical and sub-tropical areas.* 1946.

Nicholls, Lucius. *Aids to tropical hygiene.* 3rd ed. 1946.

Shelley, H. M. *An epitome of the laboratory diagnosis and treatment of tropical diseases.* 2nd ed. 1949.

Steinhaus, E. A. *Insect microbiology.* c1946.

Van den Ende, M. *Chemotherapeutic and other studies of typhus.* 8th ed. 1946.

Zeliff, C. C. *Manual of medical parasitology.* c1947.

Miscellaneous

Collens, W. S. *Helpful hints to the diabetic.* c1949. (gift of publisher.)

Denny-Brown, D., ed. *Selected writings of Sir Charles Sherrington.* 1940. (gift of Dr. Van Poole.)

Goepp, R. M. *Medical state board questions and answers.* 8th ed. c1950. (gift of publisher.)

Orban, Balint, ed. *Oral histology and embryology.* 2nd ed. c1949. (gift of Dental Society.)

Vaughan, H. S. *Congenital cleft lip, cleft palate and associated nasal deformities.* c1940. (gift of Dr. Van Poole.)

World Health Organization. *Manual of the international statistical classification of diseases, injuries, and causes of death.* 6th rev. v.2. 1949. (gift of Board of Health.)

* * *

Of importance to all medical libraries is the recent announcement that the great Surgeon-General's Index-Catalog is to be brought to a close. The Army Medical Library will publish a volume or volumes which will complete the record up to the mid-century mark. The Index Catalog was planned in the mid-19th century, when medical research and publication were of a different character than that of the present and they feel it is no longer feasible to continue this type of index. The Army Medical Library promises that the *Current List of Medical Literature* will be augmented and improved in an effort to provide more effective reference service. If this is done, it should be a boon to medical research workers, who have labored so long without up to date indexes.

* * *

We wish to make a correction in a previous acknowledgment crediting the Neurology & Psychiatry section of *Excerpta Medica* to **Dr. Mon Fah Chung.** Dr. Chung is no longer subscribing to this section for the Library, and we would greatly appreciate receiving it from any other doctor who has copies to donate.

* * *

We find that we have about twenty copies of each of the following publications:

SERIES OF LECTURES GIVEN IN HONOLULU by ALTON OCHSNER.

SERIES OF LECTURES GIVEN IN HONOLULU by I. S. RAVDIN.

TUBERCULOSIS IN THE TERRITORY OF HAWAII by BRUCE H. DOUGLAS.

If any doctor would like copies, we would be glad to distribute them as long as they last.

BOOK REVIEWS

Cardiovascular Disease. By L. H. Sigler, M.D., F.A.C.P. 551 pp. Price $10.00. Grune & Stratton, Inc., New York, 1949.

In this book Dr. Sigler adequately covers the fundamental principles involved in the management of cardiovascular disease. The author uses his extensive medical experience to emphasize clinical diagnostic principles, rather than rely on mechanical devices for diagnosis.

The sensible outline of therapeutic procedures used in cardiovascular emergencies is particularly refreshing. Here, also, the author uses his vast clinical experience to help mold his clear-cut therapeutic approach.

This concise volume of 551 pages is a practical reference book, not only for the general practitioner but also for the internist.

HENRY C. GOTSHALK, M.D.

Simple Nursing—An Illustrated Handbook. By Wava McCullough and Marjorie Moffit, R.N. 238 pp. Price $3.00. McGraw-Hill Book Company, Inc., New York, Toronto, London, 1949.

The simple procedures which are most commonly used in both home and hospital are demonstrated in this book with very clever drawings showing each one. Procedures covered are such as patient environment, patient comfort, patient hygiene, diagnostic procedures, therapeutic procedures, special procedures, aseptic procedures, the care of the convalescent patient, feeding the patient and the emergency patient. These are taken up first from the hospital approach and then the home approach. For example, clever drawings illustrate how to make a paper bag or how to best ventilate a sick room. In the line of convalescent care, it shows how to knit, crochet, etc.

The illustrations are very unique and can leave little doubt in one's mind as to how to do certain things. This book would make a good reference book for any practical nurse and would be a wise addition to a home to assist members of the family in the care of their illnesses at home. It could undoubtedly be used to a good advantage in the Red Cross Home Nursing course as well.

MABELCLAIRE NORMAN, R.N.

Epilepsy and Convulsive Disorders in Children. By Edward M. Bridge, M.D. First Edition. 670 pp. with illustrations. Price $8.50. McGraw Hill Book Company, New York, Toronto, London, 1949.

Any doctor faced with the problem of treating a child with epilepsy will find the answers to his questions and to those of the family in this book. As the physician in charge of the Johns Hopkins Epilepsy Clinic, Dr. Bridge has had a wide experience with the disease. He is able to speak with authority on the factors of brain injury, heredity, physiology, personality and environment, having studied the records of 742 patients.

This book does not follow the usual design of medical textbooks. Not only is it concerned with how to diagnose the disease and what drugs to use for treatment, it deals also with the problem of epilepsy as a whole—its effects on the patient, his family, his school and his community. The psychological aspects are stressed and the necessity for the education of the parents, teachers and friends of children with seizures is well brought out.

The clinical features of the disease, as seen in children, are well covered. The diagnostic procedures available are explained with their aids and limitations noted. An appendix of sixty-five pages gives specific instructions for the care of patients and detailed information on ketogenic diets, etc. This book should be welcomed by practitioners, pediatricians, nurses and social workers. It should appeal also to parents who wish to learn more about the problems they face and how to cope with them.

JOHN J. LOWREY, M.D.

Intestinal Intubation. By Meyer O. Cantor, M.D., M.S., F.A.C.S. 333 pp. with 138 illustrations and 267 references. Price $7.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1949.

This is an excellent treatise upon the subject of intestinal intubation. It is well written, well documented, and very well thought out. The purpose of the book is well stated in an early chapter; I quote, "We hope to have under one cover everything that is known about this subject so that it can be readily available for quick reference." To the best of my knowledge, this aim is accomplished. I should like to qualify my praise of this work for two reasons; one, that it is repetitive and that it does plug the author's tube a little too much; and second that the author's views concerning the efficiency of deflation of the obstructed large bowel by intubation seem somewhat over-optimistic. Certainly, in some instances of colonic obstruction, there is insufficient time safely to depend on this method of deflation. Nevertheless, this is recommended reading on this subject and is an excellent source book for those who deal with intestinal obstruction.

ROBERT JOHNSTON, M.D.

Questions Medical State Board and Answers. By R. Max Goepp, M.D. and Harrison F. Flippin, M.D. New, 8th Edition. 663 pp. Price $7.00. W. B. Saunders Company, Philadelphia and London, 1950.

I unhesitatingly recommend this book to anyone wishing to review for State Board or other professional medical examinations. It is amazing to me that so much information can be packed into a volume of some 600 pages.

I have never before had the occasion to review Goepp's book, but have known of its existence since college days. The answers are concise and accurate and surprisingly up-to-date.

I have compared this book with Rypin's *Medical Licensure Examinations,* 5th Edition, by Lippincott, and find that they both are useful for review. Rypin discusses subjects and then at the end of the chapter suggests questions. Goepp's volume, on the other hand, asks the questions and then relates the answers. I believe that this is a more practical and useful method of review.

D. B. BELL, M.D.

Primer of Allergy. By Warren T. Vaughan, M.S., M.D. Revised by J. Harvey Black, M.D. 3rd Edition. 175 pp. with illustrations. Price $3.50. C. V. Mosby Company, St. Louis, Mo., 1950.

This little book is a pleasant one. It is well written, concise, disagrees infrequently with generally accepted viewpoints and is humorous enough to make it enjoyable. It is written primarily for the allergic patient, but as the name indicates it can serve as a primer of allergy for the physician. Cartoons, particularly those by Webster, add materially to its interest. It is recommended without hesitation to the general practitioner as an aid in the management of the allergic individual. The physician may find it useful in presenting instructions to patients for such procedures as "Food Diary," "Wheat Avoidance," etc. With some interpretation it may be recommended to patients both for their information and pleasure.

While on the whole it is excellent, there are a couple of criticisms that can be made of it. A few expressions may irritate the physician and leave him a little reluctant to recommend the book to patients. In a book designed expressly for patients there seems to be little occasion for sections entitled "Directions to the Doctor for Allergen Administration," and "Directions to the Doctor for Hyposensitization." The individual physician may not choose to follow the author's instructions.

On the whole, the good points of the book far outweigh the bad. It should be bought, and enjoyed.

SAMUEL D. ALLISON, M.D.

Electrocardiography. By Louis Wolff, M.D. 187 pp. with 110 figs. Price $4.50. W. B. Saunders Company, Philadelphia and London, 1950.

This book is primarily an introduction to "unipolar" electrocardiography. The subject is simply presented so that those unfamiliar with multiple "unipolar" precordial and limb leads will have a clear idea as to what to expect in a normal and abnormal tracing. Many of the conflicting ideas in this field are left out so that the reader could learn what is generally accepted in this confusing field.

The clinical part of this text is limited in scope. A few of the important clinical pictures in electrocardiography are illustrated and explained. Arrhythmias are left out completely in this text.

I recommend this book highly to those interested in learning the fundamentals of unipolar electrocardiography.

KIKUO KURAMOTO, M.D.

Practical Neurological Diagnosis. By R. Glen Spurling, M.D. New 4th Edition. 290 pp. with 118 illustrations. Price $5.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

This fourth edition of a well known book is just what the name implies. It makes no attempt to fully describe neurologic disorders. It elucidates neurological symptoms and describes how to elicit and interpret neurological signs. Sufficient anatomical detail is given to show the nervous pathways involved without reference to other texts. Several useful charts are included, and the diagnostic value of spinal fluid and x-ray examinations are well covered. The diagnoses of lesions amenable to neurosurgery are stressed.

JOHN J. LOWREY, M.D.

Health Teaching in Schools. By Ruth E. Grout, M.P.H., Ph.D. 320 pp. with 18 figures. Price $4.00. W. B. Saunders Company, Philadelphia & London, 1948.

We at Kauluwela feel this book is the best published so far on health teaching in schools. We especially recommend it to *every employee* of the Department of Public Instruction, and hope each will read Chapter IX, and make use of it, since so far there hasn't been anything published on evaluation as practical as this. The ideas set forth in this chapter can be adapted to all school work.

LILLIAN P. KRUSE
MARY J. COUCH

Therapy Through Interview. By Stanley G. Law, M.D. First Edition. 313 pp. Price $4.50. McGraw-Hill Book Company, New York, Toronto, London, 1948.

This engaging little book does much to answer the bewildered practitioner's query, "Just exactly what is psychotherapy?" Further, it offers him a new approach to some of the many psychosomatic illnesses which traverse his office daily, if he can muster the time and the inclination. If his results are anything like those of the author, he will feel a thousand fold repaid for the few hours invested in reading these chapters.

The pages are refreshingly free of the usual polysyllabic psychiatric fare. The synthetic case histories move rapidly to startling conclusions through the medium of imaginary dialogue between patient and physician. It is all wheat, no chaff, with poignant asides to the reader. What may seem oversimplification to the psychiatrist will be welcomed by the busy general practitioner. The types of cases are well chosen, commonly seen, and concisely handled. There are good and poor prognoses; happy and depressing outcomes; but interesting action all the way.

The author is a confirmed G.P. at heart, and he is frequently pleased to interrupt psychotherapy just long enough to remove the patient's appendix or to treat an unrelated organic complication in the middle of the night. In all, it is delightful reading, contains as many chuckles as a 3-act comedy, and is recommended by this reviewer for addition to your bedside collection.

WILLIAM H. STEVENS, M.D.

Occupational Therapy. By William Rush Dunton, Jr., M.D., and Sidney Licht, M.D. 350 pp. with 12 illustrations. Price $6.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

Dr. Dunton, Jr. and Dr. Licht have brought to the professional field a long overdue book on the history, standards, and aims of occupational therapy. Enlisting the cooperation of a number of medical specialists who have successfully applied occupational therapy as an adjunct to treatment in their special fields, the editors have brought forth an excellent source book for physicians seeking information on the subject.

The importance of occupational therapy activities in dynamic treatment programs has now been recognized and this book should give added stimulus to training and practice in this field.

With the increased number of training schools, and the wider use of this treatment, there is a great need for literature in this field. This book, which contains a discussion of occupational therapy for psychiatric disorders, amputees, hospitalized patients, cerebral palsy, tuberculosis, heart disease and other conditions, should be an important contribution towards that end.

CATHARINE E. NOURSE, O.T.R.

ALSO RECEIVED

Surgical Clinics of North America, Chicago Number—Urology, Gynecology and Obstetrics. 312 pp. Price $18.00 per year. W. B. Saunders Company, Philadelphia and London, 1950.

Medical Clinics of North America, Nationwide Number—Medical Therapeutics. Pp. 307-608. Price $18.00 per clinic year, cloth binding; $15.00 per clinic year, paper binding. W. B. Saunders Company, Philadelphia and London, 1950.

NOTES AND NEWS

PERSONALS

Dr. Clarence Yoshio Sugihara, of Honolulu, has opened his offices in the Medical Arts Building, on South King Street, where he is limiting his practice to the specialty of allergy. Dr. Sugihara has returned to Honolulu after three years of postgraduate studies at the Milwaukee County Hospital, Milwaukee, Wisconson. Dr. Sugihara received a Master of Science degree in internal medicine from the Marquette University as a result of this special training. He received his M.D. from Marquette University in 1941 and was in practice in Honolulu for several years before specializing in allergy.

Dr. and Mrs. Walter Strode, of Honolulu, have announced the birth of their first child, a daughter, who was born on March 29th, in New Orleans. Dr. Strode, who is taking a fellowship in surgery at the Oschner Clinic, New Orleans, is the son of **Dr. and Mrs. Joseph E. Strode,** of Honolulu, who are currently touring the mainland, Central and South America. The senior Dr. Strode also attended the meeting of the American Surgical Association in Colorado Springs in May and plans to return to Honolulu the latter part of June.

Dr. Harry L. Arnold, Jr., Editor of THE JOURNAL, has been honored by appointment as Chairman of the Public Health Committee of the Honolulu Chamber of Commerce. He succeeds **Dr. Lyle G. Phillips,** who resigned after two years as chairman of this important committee.

Dr. and Mrs. Hajime Akita, of Honolulu, welcomed the arrival of a daughter, Linda Emy, who was born at the Kapiolani Hospital on February 15.

Dr. Frederick L. Giles, of Honolulu, has made two mainland trips in recent months, one to a public relations meeting of the American Medical Association, in Chicago, and the other to a meeting of the American College of Physicians, in Boston, where he represented **Dr. Nils P. Larsen** on the Board of Governors. Dr. Giles took a quick trip through Mexico, Guatemala and Havana on this latter trip.

Dr. Robert B. Faus, of Honolulu, has been appointed Medical Director of the Hawaii Medical Service Association and has taken over his new duties on a part time basis. He succeeded **Dr. Fred Irwin,** who has gone to the mainland for a prolonged stay.

Several Hawaii physicians took a course in the Medical Aspects of Atomic Warfare, which was held at the University of California, in Los Angeles, in May. The physicians taking this course are **Dr. C. L. Wilbar, Jr.,** President of the Territorial Board of Health; **Dr. Guy S. Haywood,** of Puunene, Maui, and **Dr. C. A. Domzalski, Jr.,** of Honolulu. In addition, Mr. B. J. McMorrow, Director of the Division of Sanitation of the Territorial Department of Health, took the course in radiological monitoring, which is the technique of discovering contaminated areas and objects through the use of the Geiger counters and other devices which locate radioactivity.

The Surgeon General of the U. S. Army, **Major General R. W. Bliss,** through **Colonel H. H. Twitchell,** Commanding Officer of the Tripler General Hospital, Honolulu, has recently presented letters of commendation to three Honolulu physicians. In a presentation ceremony **Dr. Nils P. Larsen, Dr. Forrest J. Pinkerton,** and **Dr. Joseph E. Strode** were given these presentations on the 4th Anniversary at the Army Medical Corps Graduate Professional Training Program.

Dr. Frederick Alsup, of Honolulu, has announced that the Alsup Clinic was moved from the previous downtown location to a new building located at Beretania and Kalakaua.

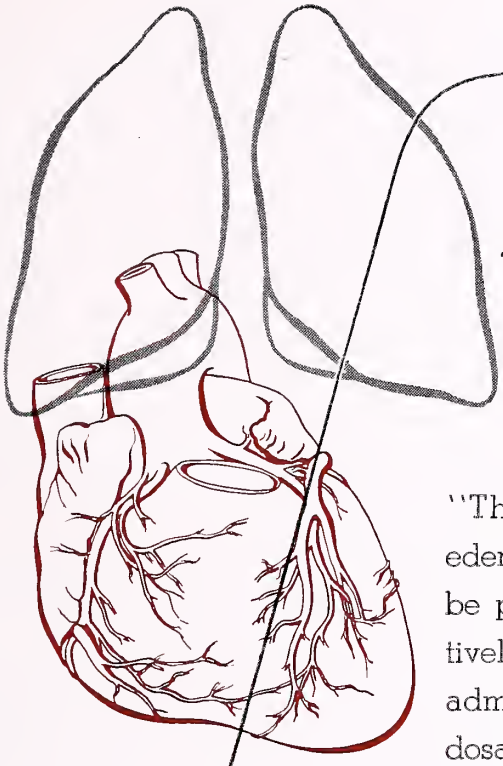
The Queen's Hospital, of Honolulu, announces the names of the internes and residents who will begin their services on July 1. They are as follows: **Dr. Lawrence N. Gilliam** from Virginia, graduate of University of Virginia; **Dr. Mary A. Glover** from Rhode Island, graduate of University of Washington; **Dr. Richard S. F. Lam** from Honolulu, graduate of Creighton University, Omaha, Nebraska; **Dr. Cora M. Lee** from Idaho, graduate of Women's Medical College, Philadelphia, Pennsylvania; **Dr. George H. Mills** from Hawaii, graduate of Boston University; **Dr. Robert K. Mookini, Jr.,** from Honolulu, graduate of Tulane University, New Orleans, Louisiana; **Dr. Richard P. Perrine** from California, graduate of University of California; **Dr. James A. Rutherford** from New York, graduate of Long Island University, Brooklyn, New York; **Dr. Carolyn F. Taylor** from Oregon, graduate of University of Oregon; **Dr. Thomas T. Tennant** from California, graduate of University of California; **Dr. Robert M. Turner** from Washington, graduate of University of Washington; **Dr. Marjorie Williams** from Pennsylvania, graduate of University of Pennsylvania; **Dr. Yutaka K. Yoshida** from Honolulu, graduate of University of Cincinnati.

The following will begin residencies: **Dr. Robert T. Bloomer** from Canada, graduate of University of Cincinnati; interned at John Sealy Hospital, Galveston, Texas, to be an assistant resident in medicine. **Dr. Richard C. H. Hitchen** from Canada, graduate of Queen's University, Canada; interned at Vancouver General Hospital, Vancouver, B. C., Canada, to be an assistant resident in obstetrics and gynecology. **Dr. Charles S. Judd** from Honolulu, graduate of Yale University; interned at Queen's Hospital, to be an assistant resident in surgery. **Dr. Don F. Kimmerling** of Arizona, graduate of Yale University; interned at San Joaquin General Hospital, French Camp, California, to be an assistant resident in medicine.

The Kuakini Hospital, of Honolulu, has **Dr. Grace Pfeifer,** a native of Racine, Wisconsin, as an interne a portion of this year prior to her beginning an interneship at the Passavant Hospital, Chicago. Dr. Pfeifer was a graduate March, 1950, of the Northwestern University Medical School, in Chicago. **Dr. Akiko Toyota,** a native of Kauai, who attended the Tokyo Women's Medical College, in Tokyo, Japan, is serving as a junior interne.

The Children's Hospital, of Honolulu, has added another resident to the Pediatrics House Staff. **Dr. William Sherman** is a native of Winnipeg, Manitoba, and is a graduate of the University of Manitoba Medical School,

(Continued on Page 338)



PULMONARY EDEMA AND PAROXYSMAL CARDIAC DYSPNEA

"The development of pulmonary edema at night may in certain cases be prevented and in addition effectively treated by intramuscular . . . administration of aminophyllin in dosages of 0.5 Gm."[1]

The diuretic action of Searle Aminophyllin frees the tissues of excessive fluid; its myocardial stimulating action improves the efficiency of heart contractions.

G. D. Searle & Co., Chicago 80, Ill.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

SEARLE *AMINOPHYLLIN**

ORAL...PARENTERAL...RECTAL DOSAGE FORMS

*Contains at least 80% of anhydrous theophylline.

SEARLE *RESEARCH IN THE SERVICE OF MEDICINE*

1. Barach, A. L.: Edema of the Lungs, Am. Pract. 3:27 (Sept.) 1948.

(Continued from Page 336)

in 1947. Following this he served as an interne at the Misericordia Hospital in Winnipeg and at the St. Boniface Hospital, St. Boniface, Manitoba, 1947 to 1948. Following this he had a residency in pediatrics at the Vancouver General Hospital, Vancouver, B. C., from 1949 to date.

Hawaii

Busy Bodies

Dr. Howard E. Crawford was elected president of the Hilo Rotary Club on April 7, 1950. He succeeds **Dr. Leo Bernstein** who is the present president of the Hawaii County Medical Society. Dr. Crawford is also Chief of Staff of the Hilo Memorial Hospital and president of the Hawaii Territorial Medical Association.

Travelers

Dr. and Mrs. Timothy D. Woo left for the mainland on April 1st on a three month vacation-post graduate study trip. **Dr. Richard Yamanoha** is taking his place at Pepeekeo Hospital.

Taste of Own Medicine

Dr. John Milford of Olaa Hospital underwent a cholecystectomy recently.

Dr. Charles S. Judd, who is pinch-hitting for Dr. Clyde Phillips, lost his appendix at Hilo Memorial Hospital on April 8.

Dr. Clyde Phillips was at Wisconsin General Hospital for treatments for a chronic ailment. He has returned from a three months' mainland trip.

Transfers

Dr. Donald S. Depp left Olaa Hospital on April 15, 1950, to go into private practice at Waikiki. The Olaa district and this society will miss him tremendously.

We understand **Dr. Kaname Yoshimura,** formerly of Kealakekua, left us too to establish residency in Honolulu. We are sure the Kona people are grieving over his departure.

Stork Club

Dr. and Mrs. Walter S. L. Loo of Hilo welcomed their first baby girl on April 17, 1950. She tipped the scale at 7 pounds and 7 ounces. The Loos have two other children, both boys.

Kauai

Dr. Keith Kuhlman has recently been appointed government physician for the Koloa District.

Dr. and Mrs. Samuel Wallis left Kauai in the middle of April for the mainland. They will be gone for two months for study and vacation.

Dr. and Mrs. Jay T. Kuhns started a two months' trip around the world in the latter part of March.

Dr. Webster Boyden left Kauai for a two months' stay in Oregon to attend a conference.

Maui

Dr. Guy S. Haywood of Puunene, Maui, left for the Mainland recently, representing Maui County Medical Society to participate in a training course in Atomic Warfare Defense.

Dr. A. J. Burden of Paia and his family left Maui on April 14 enroute to the mainland for a three month business and pleasure trip. He will work at Mayo Clinic in Minnesota and plans to attend the industrial physicians meeting in Chicago, the Kiwanis National Convention at Miami, Florida, and the AMA meeting in San Francisco.

During his absence **Dr. Robert Cole** will take over his practice (at Haliimaile) in addition to his own.

NEWS

Honolulu Surgical Society

This Society had the pleasure of hearing in March a paper by **Dr. Forrester Raine,** of Milwaukee, Wisconsin, Associate Professor of Surgery at the Marquette University Medical School, who spoke on "Surgical Lesions of the Esophagus." **Dr. Damon Pfeiffer,** surgeon of the Lankenau Hospital, Philadelphia, discussed this paper.

In April the Society was fortunate to hear several papers by **Dr. O. T. Clagett,** of Rochester, Minnesota Dr. Clagett delivered an address on "Carcinoma of the Lung," at the Mabel Smyth Building and conducted a Breakfast Seminar at the Pacific Club on "General Surgical Lesions." In cooperation with **Dr. L. M. Eaton,** neurologist, he presented a paper on "Myasthenia Gravis."

In cooperation with the Honolulu Neurological Society and the Honolulu Ophthalmological Society Dr. Eaton presented a Breakfast Seminar at the Pacific Club, discussing "Some Neurological Diseases of Interest to Ophthalmologists."

Honolulu Academy of General Practice

This Society was addressed by two noted allergists at the regular meeting in March. **Dr. Leo H. Criep,** Chief of Allergy and Associate Professor of Medicine at the University of Pittsburgh, Pennsylvania, talked on "What is New in Allergy." **Dr. Louis Friedman,** Assistant Professor of Rhinology, University of Pittsburgh, discussed the "Rhinological Aspects of Allergy."

Honolulu Obstetrical & Gynecological Society

At the February meeting of this Society a moving picture was shown on the use of "Sodium Pentothal in Obstetrics." **Dr. Satoru Nishijima** of Honolulu presented a paper on "The Bufo Test in Pregnancy."

At the March meeting **Dr. K. S. Tom** and **Dr. Frank C. Spencer** presented a report on the Postgraduate Assembly of Obstetrics and Gynecology Meeting, which was held in Los Angeles recently.

Special Lecture

During March, **Dr. Jan H. Tillisch,** of Rochester, Minnesota, delivered a special lecture under the auspices of the Postgraduate Education Committee of the Honolulu County Medical Society on the "Medical Indications and Contra-Indications for Air Travel." Dr. Tillisch was formerly director of Aviation Medical Research, at Randolph Field, Texas, and is the chief physician of the Northwest Airlines.

Used Medical Equipment For Sale

Instrument cabinets, surgical tables, Mayo tables, small gas machine, ENT chairs, revolving stools, surgical ENT instruments, and bronchoscopes, at one-third original cost. From the former practice of Dr. Van Poole. Call Dr. W. J. Holmes, 45 Young Hotel, 6105.

For Sale or Lease

General practice for sale or lease, including completely equipped offices in the Young Hotel Building. Address all inquiries to the office of the HAWAII MEDICAL JOURNAL.

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

COMMITTEE

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PERSONNEL POLICIES OF INTEREST TO THE NURSING PROFESSION

VERGIL F. BRADFIELD*

The successful practice of team work in institutional nursing involves sound personnel management policies that apply to all members of the team—supervisory personnel, graduate and practical nurses, orderlies and attendants. It must be recognized that each member of the team has a reason for working and a self-determined goal to attain.

Mr. Thomas G. Spates, Vice President for Personnel Administration, General Foods Corporation, a recent visitor to Honolulu, has said:

> For the attainment of those goals for which people everywhere have been striving since the early dawn, there is no substitute for sound personnel administration. The stand it takes is a powerful one, for the code it represents is universal and creative and fulfills the needs of human beings. Sound personnel administration stands for *principles* that mankind has evoked out of hope and love for centuries, for the *lack* of which we might this day be coolies of a master race, and by the *neglect* of which we may yet be servants of a totalitarian state.

Mr. Spates has given twelve ingredients of personnel relationships under the heading of "Leadership and Human Relations Where People Work":

1. The character and moral code of the enterprise.
2. Good leadership committed in writing to high principles of administration and organization rather than motivated by expediency and exploitation.
3. The practice of consultation and explanation, both up and down, through all echelons of organization.

The importance of consultation on the morale and spirit of people is well illustrated by the following quotation: "Of all the dull, dead weights men ever bore, none wears the soul with discontent like consciousness of power unused." It (consultation, explanation) can make difference between individual creativeness and sabotage.

4. The practice of keeping people informed.
5. Freedom for expression of points of view and attitudes without fear of reprisals.
6. A total work environment that appeals to the self-respect and dignity of the individual.
7. Sympathetic consideration of people's trials and tribulations.
8. Steadiness and certainty of employment.
9. A plan of promotional opportunity.
10. Equitable wage and salary structures that recognize differences in job and position requirements as measured by such factors as knowledge, skill, difficulty and responsibility.
11. A training program designed to help everyone perform, in the best known ways, the tasks that are assigned for the attainment of stated objectives.
12. Recognition—in many ways—including some of the foregoing parts, but particularly through evaluation, so that it may be said to each person on the payroll—he is prepared with what to go where. (This answers the question: How am I doing?)

Recent recommendations of the American Hospital Association's Committee on Personnel Relations may be summarized as follows:

> A general personnel policy statement should set forth the administration's overall objectives in regard to personnel which should be standard throughout the institution. Any variations should be consistent and understandable to employees.

* Administrator, Leahi Hospital.

Such a general policy statement would for employees be a guarantee by management of a depth of conviction and a willingness to follow a course of action that is guided by basic principles. It would be management translating motives behind action affecting employees into a concrete statement of purpose. For management, such statement would be a self-imposed discipline of a constructive nature, a relief from the effort of remembering past decisions in similar circumstances, and an insurance of consistency and fair treatment to all concerned. When written policies are known at all levels, there is little danger of misunderstandings.

The following considerations should be discussed in the formulation of personnel policies:

1. What results are to be accomplished? What purposes must be served or what values must be obtained if personnel activities and programs are to be aimed in the right direction?
2. Relationship of personnel to overall hospital objectives.
   a) Purposes and objectives of the hospital.
   b) Services to be provided and by whom.
   c) Administrative lines of control.
   d) Aim and intent of management toward employees.
3. Hospital objctives are accomplished only through the efforts of people. Therefore, personnel policies must satisfy the desires and goals of the individuals who do the work.
   Kinds of goals generally in the minds of employees:
   1) What do they want from the work situation?
   2) What personal motives must be satisfied?
   3) What provisions must be made in order to keep workers happy and satisfied as members of the work team, bearing in mind that happy, satisfied employees are fundamental?
4. The goal of the policies established is to correlate the purposes and objectives of the hospital with those of the employees to the end that the patients will receive the best possible care. Provide flexibility for changing conditions.

Employees in any work team are interested in economic security, opportunities for advancement and self-improvement, recognition, and a feeling of worthwhile accomplishment, fair wages, hours and working conditions, and good supervision. No employee should be subordinate to two or more persons for the same thing. These factors are guides in understanding the goals and objectives set by employees for themselves.

Mr. Norman Bailey, Assistant Superintendent of Michael Reese Hospital in Chicago, who has recently undertaken the development of personnel policies for that hospital, has stated:

The goal of personnel administration is a happy, well adjusted employee, bringing to management the greatest return possible for the investment made in his employment, and to himself the greatest possible achievement vocationally of which he is capable. There are, therefore, two sides to personnel administration.

The training of supervisory personnel plays a critically important part in employer-employee relationships. Mr. William A. De Vaughan, Personnel Officer, Bureau of Animal Industry, Agricultural Research Administration, U. S. Dept. of Agriculture, has suggested:

Training should be carried on in a manner which would not contradict in theory or practice the principle that training of subordinates is a basic responsibility of each individual supervisor. Every effort (should) be made to bind the employee and his supervisor in unity of purpose and common understanding. All training (should) begin at the top and be carried down through established organizational and supervisory lines.

Successful nursing supervisors know how to work with other people. In developing the team work idea, they will analyze the job of each member of the team, conserving the professional nurses' time for professional duties and using non-professional employees for non-professional tasks. Supervisors should feel free to recommend the acquisition of labor-saving equipment and any procedures which might make for efficiency and sound economy. They will also have the following seven points in mind as guides to success in their work:

1. Supervisors must know their employees as individuals.
2. Employees should be provided with safe and healthful working conditions.
3. Employees must always clearly understand what supervisors expect of them.
4. Employees must have guidance in doing their work.
5. Supervisors must continually examine and relate the work performance of their employees to what is expected of them.
6. Supervisors should always recognize good work and constructively criticize poor work.
7. Employees must be given opportunities to demonstrate that they can accept greater responsibilities.

The development of personnel policies may be defined as "human engineering."

ABOUT THE AUTHOR

Mr. Bradfield has been in hospital and medical school administrative work for thirty years. He went to China in 1919 and after a year of language study became business manager of Williams-Porter Hospitals and Branch Dispensaries, Tehchow, Shantung, China; also, purchasing agent and accountant for the Shantung International Famine Relief Commission, 1920 to 1922.

For 19 years he was with the Peiping (Peking) Union Medical College and Hospital, 4 years as purchasing agent, 4 as comptroller and 11 as treasurer, business manager and personnel director.

After leaving China in 1941, he served for over a year as assistant to the Dean, and as acting registrar at Wayne University College of Medicine, Detroit. From December 1942 to March 1944 he was assistant superintendent at the University of Maryland Hospital in Baltimore.

In April 1944 Mr. Bradfield came to Honolulu as administrator of Kapiolani Maternity and Gynecological Hospital during its expansion program. Since October 1945 he has been assistant director on the staff of Leahi Hospital.

FROM LOCAL HEADQUARTERS

On March 6-7 your secretary visited the island of Kauai. Here she had a most pleasant time and visited the hospitals and met most of the nurses. Now she has visited almost all the hospitals and met many of the nurses. To her it was a most invaluable experience for now she knows who the nurses are and what situations they are in. This will help her a great deal in the Counseling and Placement Service.

We wish everyone could have gone to the Biennial Convention in San Francisco for we know that everyone who attended came back with a great deal for their association as well as for themselves. This is the first time so many have been able to go from here and they certainly made a place for themselves. Hawaii Visitor's Bureau cooperated with us as did the two major airlines and we arrived all bedecked with leis, etc. Each district sent a delegate and in all there were about 20 from the islands.

The date of the Annual Territorial Convention has been set for Sept. 27-28-29, 1950 and we would gladly welcome any ideas about material that should be included in the agenda.

May I urge you all to be individual ambassadors for your association and draw others into our fold? Together we can do a lot for nurses.

M. NORMAN, R.N.
Executive Secretary

MISS BENZ A VISITOR

Miss Gladys S. Benz, Director of the Department of Advisory Service to State Leagues of Nursing Education, was a visitor in the islands in late April. Miss Benz spent much of her time advising members of the Hawaii League of Nursing Education and the Board for Licensing of Nurses, and made field trips to the various nursing education institutions.

Miss Benz is a graduate of the University of Minnesota School of Nursing, with a B.S. degree from Teachers College, Columbia, and a M.A. degree from the University of Minnesota. She has been with the National League of Nursing Education at 1790 Broadway, New York City, since September 1948. Prior to this appointment, she was Professor of Nursing and Associate Director at Union University School of Nursing, Albany, New York. Other positions held were, Associate Director of Nursing Education and Assistant Professor at Russell Sage College School of Nursing; member of the New York State League of Nursing Education Board of Directors; member of the New York State Board of Nurse Examiners; Head Nurse in the Pediatric Department of Michael Reese, Chicago; Supervisor and Assistant Superintendent of Nurses at St. Louis (Missouri) Children's, and Guest Instructor at the University of North Carolina, summer session 1944.

ANA BIENNIAL IN SAN FRANCISCO

Although by June 1, when this issue comes off the press, news of the Biennial will be "old stuff," there will probably be quite a number of nurses who will find the program agenda of interest and an index of the material our delegates will be bringing home. Highlights of the program follow:

Monday, May 8, 1950:

ANA Opening Business Meetings for Sections
NLNE Student Program and Business Meeting
ANA House of Delegates
Joint Program Meeting: "Health — A Unifying World Influence: Nursing Accepts Its Role," by Dr. Stafford L. Warren, Dean, School of Medicine, University of California.

Tuesday, May 9:

ANA House of Delegates
ANA Section Forums on Structure
Educational Films
Fiftieth Anniversary Celebration of American Journal of Nursing.

Wednesday, May 10:

Presentation and discussion of reports of the joint committees and of the joint board of directors of six national nursing organizations: National Committee for Improvement of Nursing Services, Mary Ellen Manley, Chairman.
Committee on Unification of Accrediting Activities, Veronica Lyons, Chairman.
ANA House of Delegates
NOPHN Section Meetings: Citizen Participation in Public Health Nursing.
NLNE General Meeting

Thursday, May 11:

Joint Meeting of the ANA Private Duty and General Duty Sections: Subject "Economic Security."
NOPHN Midwifery Section. "Changing Maternity Service in A Changing World," Hazel Corbin, Margaret Brooksbank, Verda Hickox.
ANA House of Delegates
"Human Needs and Nursing" by Dr. Norman Reider, Director of Psychiatric Institute, Mount Zion Hospital, San Francisco.

Friday, May 12:

ANA House of Delegates and Closing Meetings.

Other noted speakers: Howard McClusky, Ph.D., University of Michigan; Dr. Garnett Cheney, California Division of the American Cancer Society; Sydney Norwick, M.D., Vocational Rehabilitation; Agnes Gelinas, Present, NLNE; Marjorie Schlotterbeck, Nursing Consultant American Cancer Society.

TO THE BIENNIAL CONVENTION
May 8-12, 1950
San Francisco, Calif.

Official Delegates: We are allowed one for every hundred membership — this entitles us to six official delegates.

From City and County of Honolulu:
Flora Ozaki—P.H.
Esther Higuchi—P.D.
Harriett Kuwamoto—P.H. (President)
From Hawaii: **Clara Mitchell**—Office Nurse
From Maui: **Elizabeth Sheridan**—Nurs. Admin.
From Kauai: **Helen Gage**

Alternates:
Virginia Ahrendt—Industrial
Ruth Imai—P.H.

Others:
Mary Cheek—Queen's
Patience Martelon—Leahi
Mabelclaire Norman—Headquarters
Agnes Peterson—P.H.
Sena Peterson—P.D.
Millicent Larson—Ind.
Lois Bell—Ind.
Blanche Gay—P.H.
Emilia Centeio—P.H.

REPORT OF THE LEGISLATION COMMITTEE

The Nurses' Associations have been interested in several bills before the U.S. Congress. These two are probably the most pertinent: H.R. 5940 and S 1453 provide a five-year program for grants and scholarships for education in the health fields —medicine, osteopathy, dentistry and nursing. It provides grants of $200 per student to nursing schools associated with colleges or universities; $150 per student to diploma granting schools; and $100 per student to schools for practical nurses. Then, too, an additional grant is made for each student enrolled above their average enrollment. Many nurses visualize poor schools capitalizing on the latter by increasing their student enrollment injudiciously.

Organized nursing hopes that several weaknesses in this bill and its amendments might be eliminated before it is enacted. It provides for a national council of health education. Yet we are not assured that one of its three members shall be a nurse. It stipulates benefits to schools of practical nursing below college level. But three such schools are now operated by universities. The bill requires that schools be approved by state boards of nurse examiners. Yet in twenty states practical nurse schools are not under such jurisdiction. Neither are most postgraduate courses. The same provision fails to recognize national accreditation in nursing, though it recognizes it in other professions.

The other bill, H.R. 6000, is to extend social security to include city, county, and state employees and those employed in non-profit organizations, which means most hospitals. Nurses have long waited for a law granting them social security privileges. But this bill permits employers in non-profit organizations to willfully refrain from paying their share. This is discriminating against hospital workers who will derive only half the benefits per dollar they contribute. Nurses hope this phase may be deleted from the bill.

The NLNE and the ANA have been actively engaged in working for both these bills. When they come before Congress, you will be asked to write your delegate regarding them.

Delegate Farrington has expressed his opposition to the provision to include city, county, and state employees. Nurses should express their anxiety to have these employees included for thousands of nurses are so employed.

Bertha Schiffman, R.N.
Chairman, Legislative Committee

ASSISTANCE FOR KOREAN NURSES REQUESTED

At the meeting of the Advisory Council of the American Nurses' Association, held in New York City in January 1950, a letter from Miss Daisy C. Bridges, executive secretary of the International Council of Nurses, was presented which referred to the following appeal from Mrs. Oak Soon Hong, president of the Korean Nurses' Association:

> May we have the favor of asking you for some relief materials. We would be very glad if we could get some uniforms or uniform materials, warm clothing like underwear, white stockings, white shoes, models, maps, posters, films for visual education for nurses and some paper to make books and pamphlets. Much of our work is retarded by lack of material and this causes the nurses to be discouraged in their work.

Members of the Advisory Council suggested that this request be referred to state nurses associations for their consideration in the event that it is possible for assistance to be given in this connection by state nurses' associations. Because of difficulties associated with renting of space and repacking of material, the American Nurses' Association has discontinued the project of receiving and reshipping uniforms and clothing to nurses in other countries. However, it may be that state nurses' associations will be able to render some help in this request for relief.

LETTER TO A LADY-IN-WAITING

Practical Nursing students in the Infant and Child Care and Development class were asked to write a letter in response to one from a friend who is a prospective mother, asking advice in regard to breast or bottle feeding. This paper was written by Mrs. Theodora Oss who completed her course in January, 1950.

My dear June:

Your welcome letter received and I was indeed flattered that you have asked my advice about feeding your baby, either breast or bottle.

It is every baby's inherent right to have the best, and in food, I believe, breast feeding is the best. Don't you remember a few years ago when we made that long plane trip and there were two mothers aboard, one with a breast fed baby and the other a bottle fed baby? Or perhaps you were too young to notice the difference. The time came for feeding and the mother with the bottle baby was worried and distressed and so many unexpected things happened. The nipple became contaminated and had to be re-sterilized, a feeding bottle was broken in the process of heating it for the feeding, etc. The mother of the breast fed baby was calm and serene in the knowledge that her baby was getting clean, uncontaminated food (right from the producer to the consumer). She knew her baby's digestion wasn't going to be upset because mother nature so designed mother's milk that it is adapted to the baby's digestion and needs. Also, she didn't have to pay excess freight for all that bottle paraphernalia. She had it all wrapped up and in a compact container! Mother nature's valise! I only mention this because you are going to travel after your baby is born and people do so much traveling these days.

From my own experience, I was healthier when I fed my babies breast milk than for my bottle fed babies. My skin was clear, my uterus went back in place quicker. I was happier. Another important thing is that at present you are giving your baby immunity from disease and for the first few months after birth this immunity is prolonged. Remember when we went to the mainland during the war on that ship loaded with women and children and so many very young babies aboard and eczema broke out? Not one breast fed baby got it!

Most wonderful of all is the relationship of mother and baby that first year; the closeness, a memory that you will always cherish; that baby will be completely yours the first year. After that first year he becomes very independent.

I sincerely hope that I have convinced you that breast feeding is the best and to sum it all up it is cheaper, cleaner, more convenient, and more satisfactory than bottle feeding. I shall be looking forward to your next letter.

Best wishes and happiness.

Sincerely,
THEODORA

Honolulu
November 1949

POLIOMYELITIS NURSING INSTITUTE

New methods of poliomyelitis nursing will be discussed and demonstrated at an Institute for registered nurses in the Territory this summer. The topics on the program have been divided into 5 principal meetings which will be presented by physicians, nurses, physical therapists and social workers. Films on nursing care will be shown also. The time planned for the course is ten hours. Those completing the course will be eligible to enroll as American Red Cross Nurses.

For definite dates on the various islands, watch the local newspapers. All nurses are cordially invited to attend.

LORETTA SCHULER

CITY AND COUNTY OF HONOLULU NURSES' ASSOCIATION

1950 COMMITTEE APPOINTMENTS

Program:
Esther Stubblefield, Chairman
Lt. Eloise Tolle, Tripler
Esther Conroy, Queen's Hospital
Wilma Porter
Margaret Nott, St. Francis Hospital
Marjorie Elliot, Practical Nurse School
Toshiko Ono, Lanakila
March Jamieson, Leahi Hospital
Shina Murakami, PHN
Martha Chung, Queen's Hospital
Mitsuye Murakami, Kuakini Hospital
Barbara Lee, Wahiawa General
Miyuki Ihara, Queen's Hospital
Erma Okimoto, Kuakini Hospital
Hatsue Fujimoto, Queen's Hospital

Courtesy:
Mabel Coleman, Chairman
Iva Parish, PHN
Clara Bellevue, Kapahulu Health Center
Sena Peterson, Private Duty

Finance:
Ruth Imai, Chairman
Alice Shida, Queen's Hospital
Bernadette Yoshina, St. Francis Hospital

Membership:
Loretta Shuler, Chairman
Marjorie Higa, St. Francis Hospital
Ethel Hass, Leahi Hospital
Hisako Yoshida, Children's Hospital
Hatsune Araki, Kuakini Hospital
Grace Tagasawa, Queen's Hospital
Margaret Russ, Private Duty
Ruth Thurman, Kapiolani Hospital

Sakae Kawakami, Lanakila Health Center
Gladys Tomei, Wahiawa General
Dorothy Sakamoto, Queen's Hospital
Esther Abe, Queen's Hospital
Annabelle Kamoku, Kuakini Hospital
Patricia Suda, Kuakini Hospital
Alice Yee, Leahi Hospital

Blood Bank:
Edith Moyers, Chairman
Margaret Miller, Lanakila Health Center
Terry Ikeda, Kapahulu Health Center
Edith Shizumura, Wahiawa General

Constitution and By-Laws:
Mabel Snyder, Chairman
Margaret Gilliland, Private Duty
Erma Burgess, Kapahulu Health Center
Violet Buchanan, Leahi Hospital

Hostess:
Elsie Ho, Chairman
Mabel Gordon, Queen's Hospital
Blanch Gay, PHN
Mabel Scott
Lillian Jonsrud, Private Duty
Tomoko Uyenoyama, Kuakini Hospital
Asayo Higa, Kuakini Hospital
Katsuko Uyenoyama, Kuakini Hospital
Sumi Amano, Queen's Hospital
Frances Taguchi, Children's Hospital
Joyce Hirishiki, St. Francis Hospital
Joyce Ma, St. Francis Hospital

Arrangements—Refreshments:
May Bowron, Chairman
Agnes Peterson, Lanakila Health Center
Dorothy Murakami
Barbara Ira, Queen's Hospital
Eleanor Brown, Office Nurse
Anne Chang, Leahi Hospital
Yukie Moriuchi, Kuakini Hospital
Yoshiko Ueunten, Queen's Hospital
Natsuko Kubo, Student U. of H.
Doris Shiroma, Lanakila Health Center

Millie Larson, Industrial Nurse for Honolulu Rapid Transit Company, while on vacation attended the annual meeting of the American Association of Industrial Nurses in Chicago, April 23-29, 1950. The program agenda included Discussion of the Problems of Workers in the age group 45-65; Standing Orders; Absenteeism Control; Industrial Health in the Good Neighbor Policy; Visiting Nurse Service in Industry; the Industrial Nurse and Government.

MAUI COUNTY NURSES' ASSOCIATION

Misses Charlotte Ringrose and Marion Meseroll, employees of Kula Sanatorium, vacationed in New Zealand in March and April.

Mrs. Elizabeth Wilhelm, a graduate of Mercy Hospital, Pittsburgh, and formerly with the U.S. Army Nurse Corps, is now on the staff of Malulani Hospital. She has replaced Mrs. Claire Nagamine who is on maternity leave.

Mrs. Kawate, a graduate of Queen's Hospital, is now employed at Pioneer Hospital, Lahaina.

Miss Toshie Hamashige, a member of the Pioneer Hospital staff, became Mrs. Shishido on March 4, 1950.

The Maui County Nurses' Association held its annual banquet at the Maui Grand Hotel on February 9, 1950. Mrs. Mabelclaire Norman, Territorial Nurses' Association executive secretary, gave a very interesting and informative talk on her duties and experiences.

It was a very colorful as well as enjoyable occasion, as the costumes for the evening were holomuus and muumuus.

COUNTY OF HAWAII NURSES' ASSOCIATION

Mrs. Mabelclaire Norman was a visitor on this island in February. In the Kohala district, a dinner meeting was held at the home of Miss Lavelle Sinclair. Both active and inactive nurses in that area attended the meeting and showed interest in the Counseling and Placement Bureau, the security program and other points brought out by Mrs. Norman.

Attending were the Misses Sinclair, Goto, Shelton, Yamanaka, Nakayama, Suyama and Mesdames Taylor, Eveleth, Sproat, Alexander, Burch, Sugiyama, Sakai and Marple.

The nurses and doctors in the Kona district met with Mrs. Norman at a luncheon meeting at the Kona Hospital on February 8. Miss Rose Hee, president of the local Nurses' Association, acquainted Mrs. Norman with all of the areas on the island, hospital, dispensaries, etc.

In Hilo, Mrs. Norman met with the Future Nurses Club at Hilo High School.

Miss Margaret Barnett has returned from a year and a half of postgraduate work at Columbia University in New York City, and has resumed her duties with the Board of Health in the Kaneohe district, Oahu.

Mrs. John Harbottle (Betty Stupka) recently became the mother of a daughter. Mrs. Chitose (Araki) Kanuha recently gave birth to a second son.

New staff members at the Department of Health are Miss Betty Wohlforth and Miss Ivy Oshiro.

Mrs. Dorothy Kaladic is the new director of nurses at the Hilo Memorial Hospital. Other new staff members at Hilo Memorial are Miss Frances Shirley Albright, Miss Margaret Cushingham, Mrs. Gilbert Hay, Mrs. Helen Rosehill, Mrs. Yuriko Matsuda, and Miss Carolyn Morita.

New staff members at Olaa Hospital are Misses Ruth Peterson, Wyoma Carey, Betty Ross and Edith Kost.

Recent visitors on the mainland were Miss Mary Stanley and Miss Bess Hammer. Mr. and Mrs. Kinichi Sakai (Ruth) left in April for a mainland visit and to attend the graduation of their daughter, Joanne, from a nurses' training school in St. Louis in May.

KAUAI DISTRICT NURSES' ASSOCIATION

The annual meeting of the Kauai District Nurses' Association was held on January 9, 1950 at the Kauai Inn, Lihue, Kauai. The treasurer's report showed a balance of $1,091.91 as of December 31, 1949. Miss Masunaga reported a membership of 45 for 1948 and 44 for 1949. During the year gifts were sent by the aloha committee to six members ill in the hospital and leis were sent to 4 members who took mainland trips. An aloha gift was sent to Dorothy Teall who left Kauai to take graduate work in cancer on the mainland in preparation for her new position as cancer nurse consultant for the Territorial Board of Health. New officers and trustees elected were:

President: Elizabeth Middleton; *First Vice-President:* Kimie Tamashiro; *Second Vice-President:* Thelma Hensley; *Secretary:* Pauline Johnson; *Treasurer:* Grace Furugen; *Trustees:* Clara Chalmers and Alice Tanaka.

Working with the Red Cross Nursing Disaster Committee, volunteer nurses assisted the public health nurses in giving typhoid immunization in Hanapepe district following the recent flood. These nurses were Martha Barth, Marion Wade, Lauae Robertson, Mrs. D. F. Nicholson, Ruby Ross, Mrs. Charles Rice, Mae Jenkins, Mitsuyo Uda and Helen Gage. Mrs. Masunaga, Mrs. Paul, Miss Kakehi, Miss Arashiro, Mrs. Yamada and Mrs. Kono from Mahelona Hospital volunteered for one full day.

Beginning in February, volunteer nurses assisted the public health nurses in the immunization of the National Guard units on Kauai at Kapaa, Lihue and Hanapepe.

Miss Lillian Kakehi, 1949 graduate of St. Francis Hospital School of Nursing, has joined the nursing staff of Mahelona Hospital as night supervisor.

HELEN GAGE, *Correspondent*

1950 Committee Appointments

Program:
Kimie Tamashiro, Chairman
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KAUAI HEALTH DEPARTMENT NEWS

Miss Mollie Kirchgassner has assumed her new duties as supervisor of public health nursing on Kauai. She has replaced Miss Dorothy Teall, who left for advanced study in New York City in preparation for her new position as cancer consultant.

Miss Mitsue Iwai, a recent member of the public health nursing staff on Kauai, has been assigned to Hanapepe district. A graduate of The Queen's Hospital School of Nursing, she was among the first three cadet students selected to take the public health nursing course at the University of Hawaii.

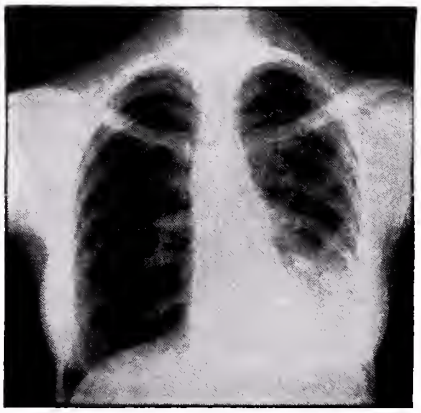
SADAKO KIMATA

WILCOX MEMORIAL HOSPITAL

Miss Elvie Manley, supervisor of men's surgical and medical ward at Wilcox Memorial Hospital, is away on a year's leave of absence. She is taking a course in X-ray at the Presbyterian Hospital, Denver, Colorado, and expects to return to Wilcox Hospital after completing her studies.

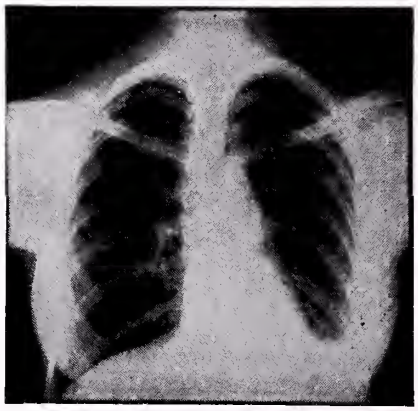
Miss Marlene Arashiro, graduate of St. Francis Hospital School of Nursing, Honolulu, has left Wilcox Hospital and is now working at the University of Illinois Research and Educational Hospital. Later she expects to take a postgraduate course in obstetrics at Chicago Lying In Hospital.

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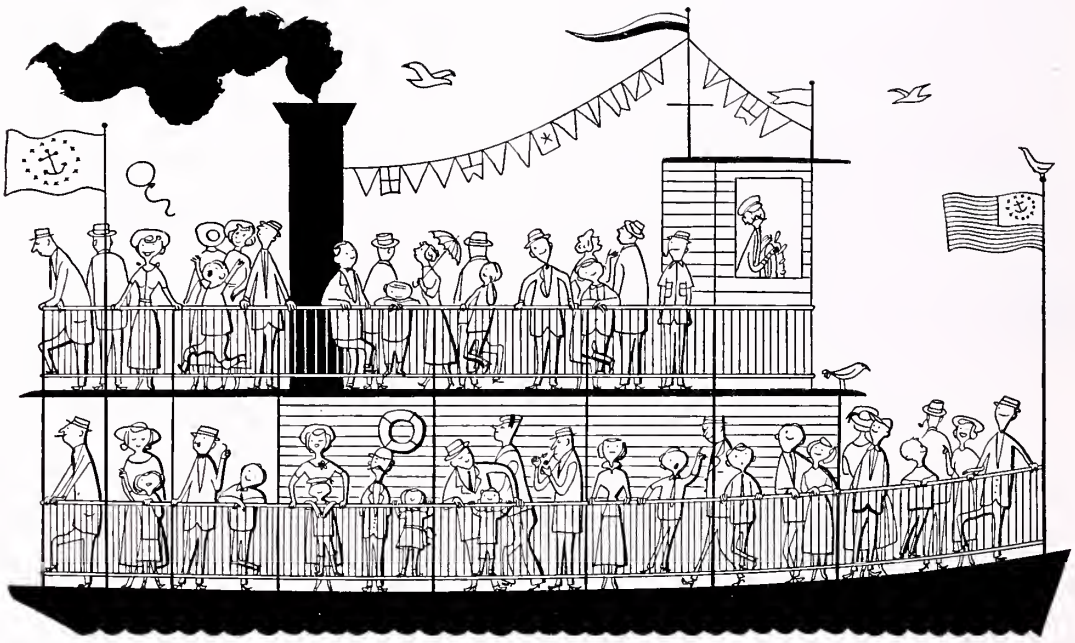
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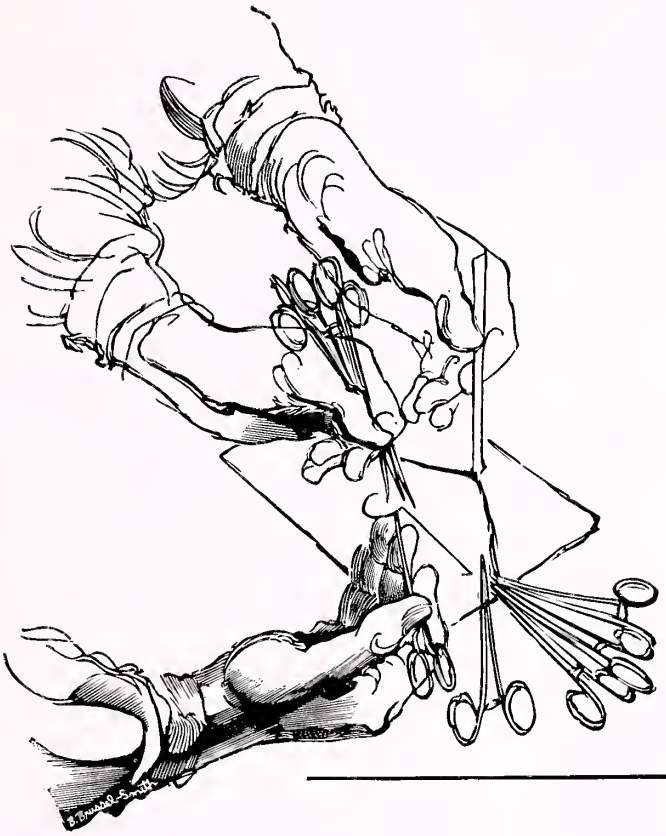
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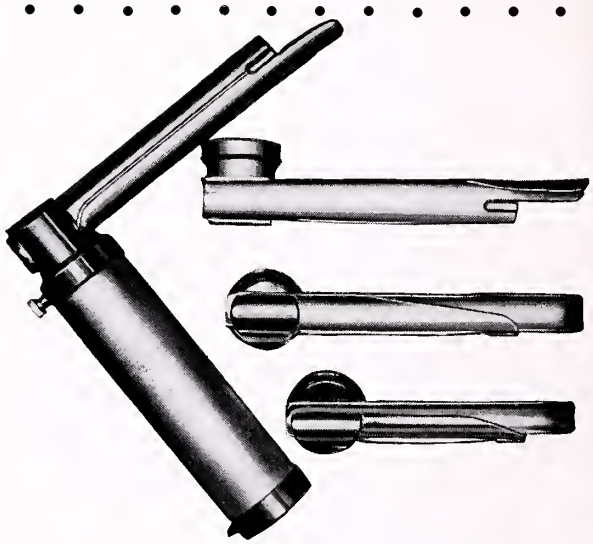
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Neustaedter, T.: Am. J. Obst. & Gynec. 46:530 (Oct.) 1943.

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Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.

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*Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245; *N. Y. State Journ. Med.*, *Vol.* 35, 6-1-25, *No.* 11, 590-592; *Laryngoscope, Feb.* 1935, *Vol. XLV, No.* 2, 149-154; *Laryngoscope,* 1937, *Vol. XLVII, No.* 1, 58-60



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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

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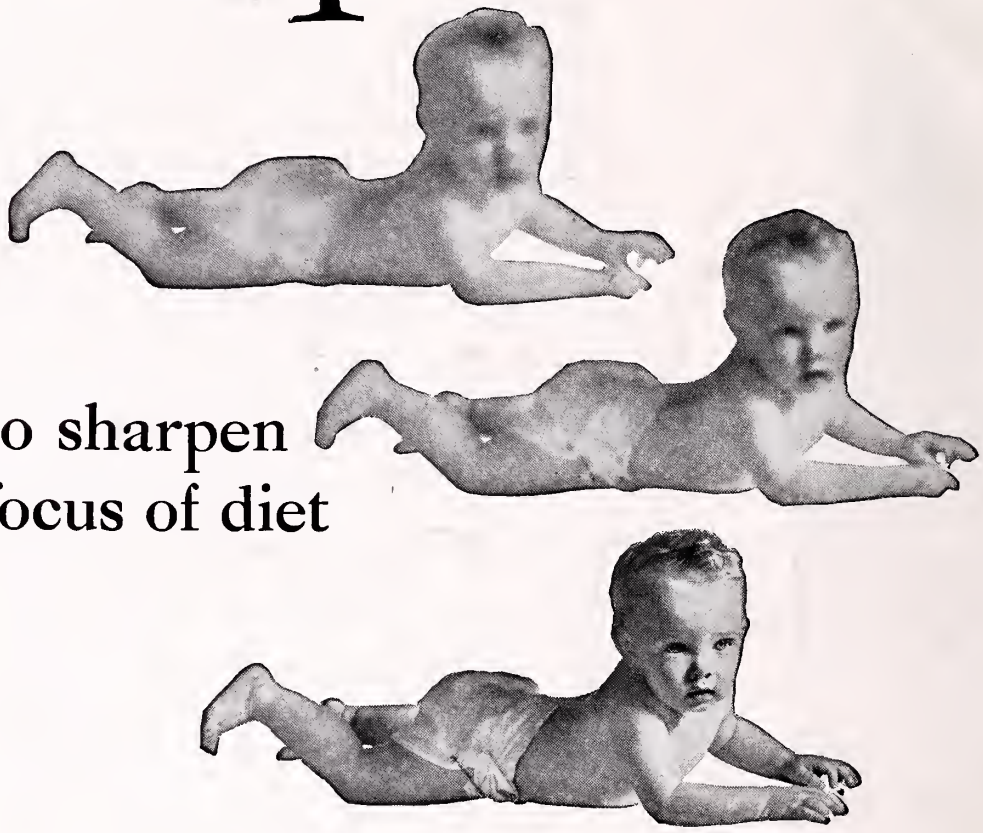
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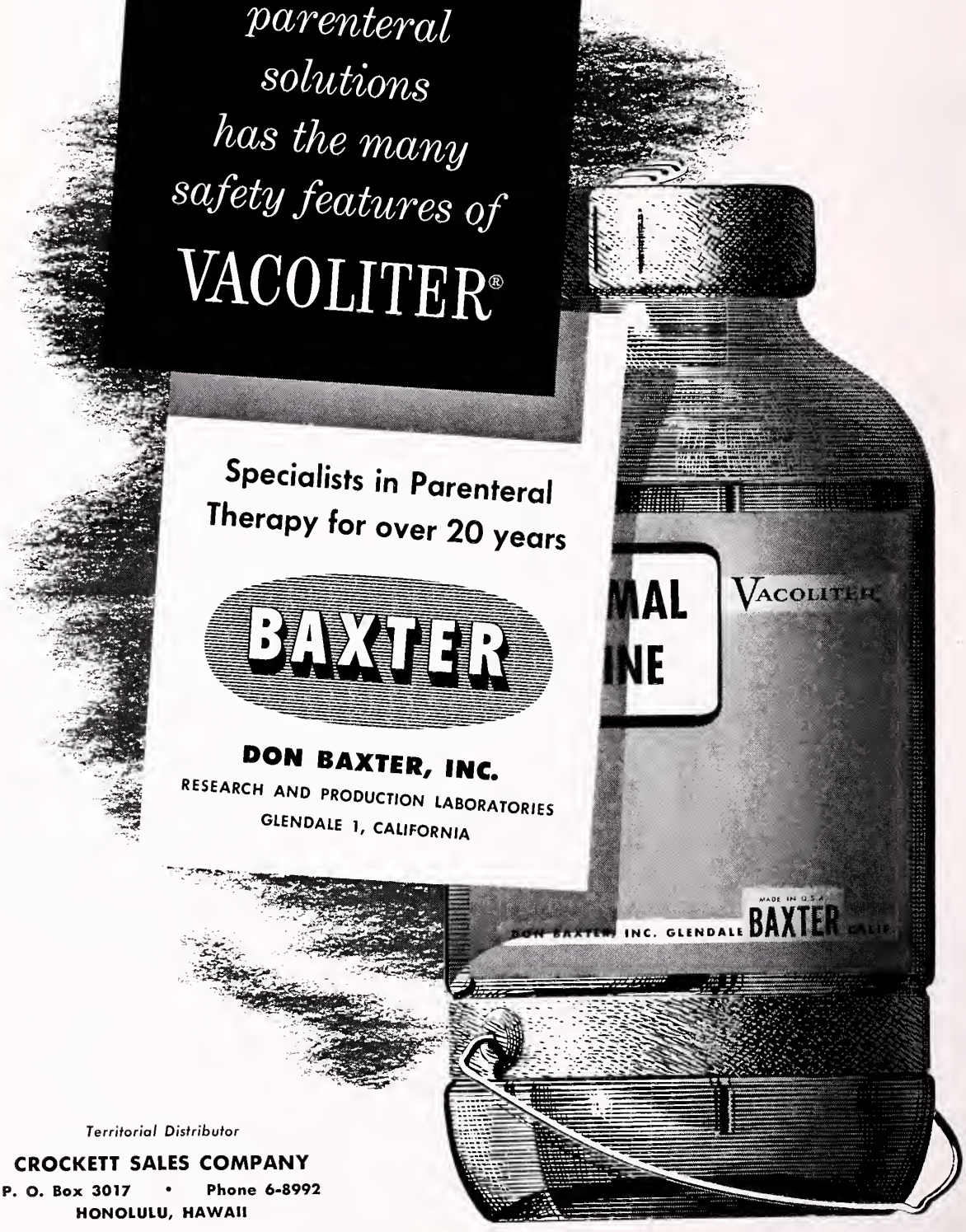
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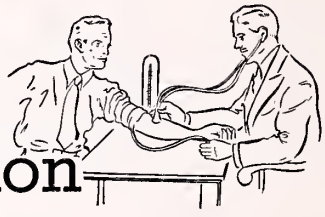
Bibliography: 1. Loveless, M. H., and Dworin, M.: J. Am. M. Women's A. *4*:105, 1949. 2. Schiller, I. W., and Lowell, F. C.: New England J. Med. *240*:215, 1949.

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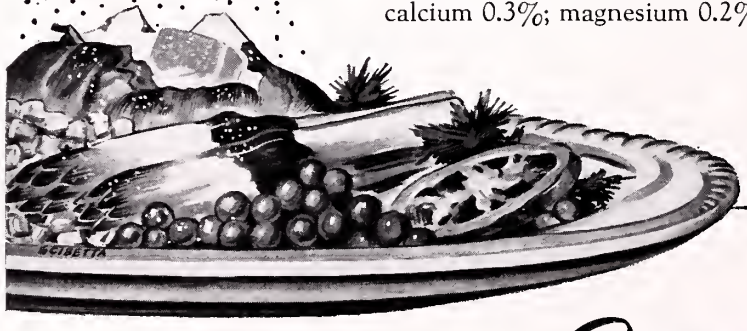
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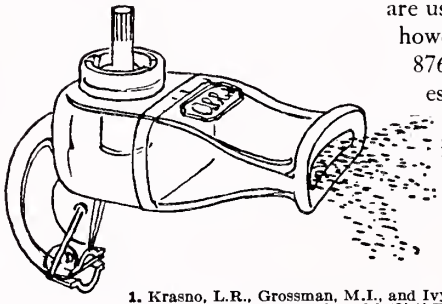
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1. Krasno, L.R., Grossman, M.I., and Ivy, A.C. (1949), The Inhalation of l-(3',4'-Dihydroxyphenyl)-2-Isopropylaminoethanol (Norisodrine Sulfate Dust), J. Allergy, 20:111, March. 2. Krasno, L.R., Grossman, M., and Ivy, A.C. (1948), The Inhalation of Norisodrine Sulfate Dust, Science, 108:476, Oct. 29.

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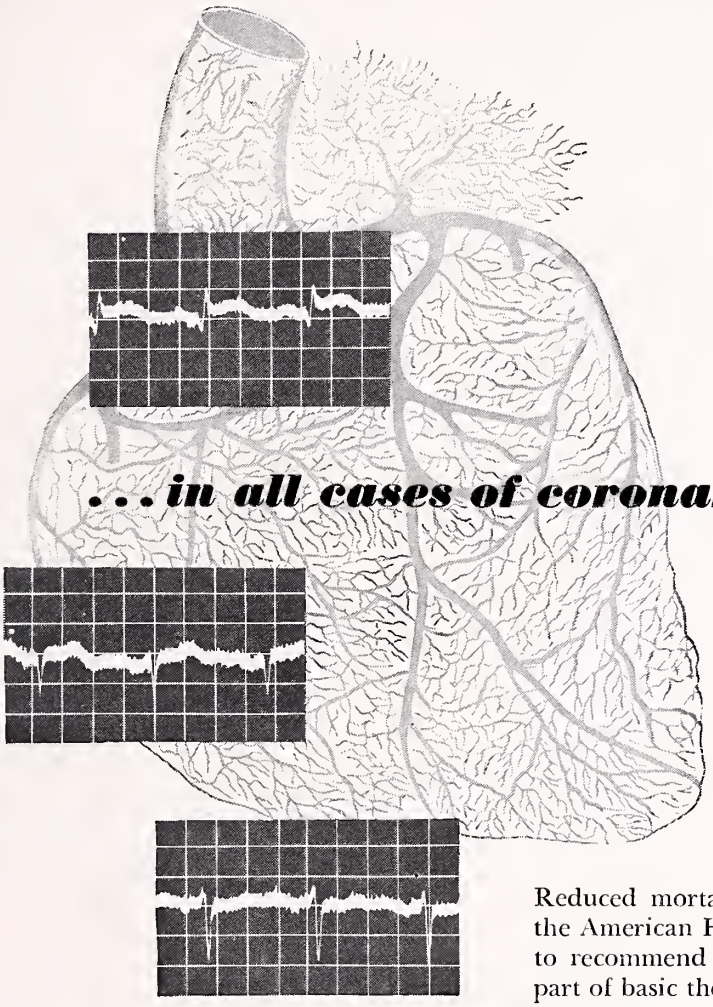
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1. Wright, et al: Am. Heart J. 36, 801 (Dec.) 1948.

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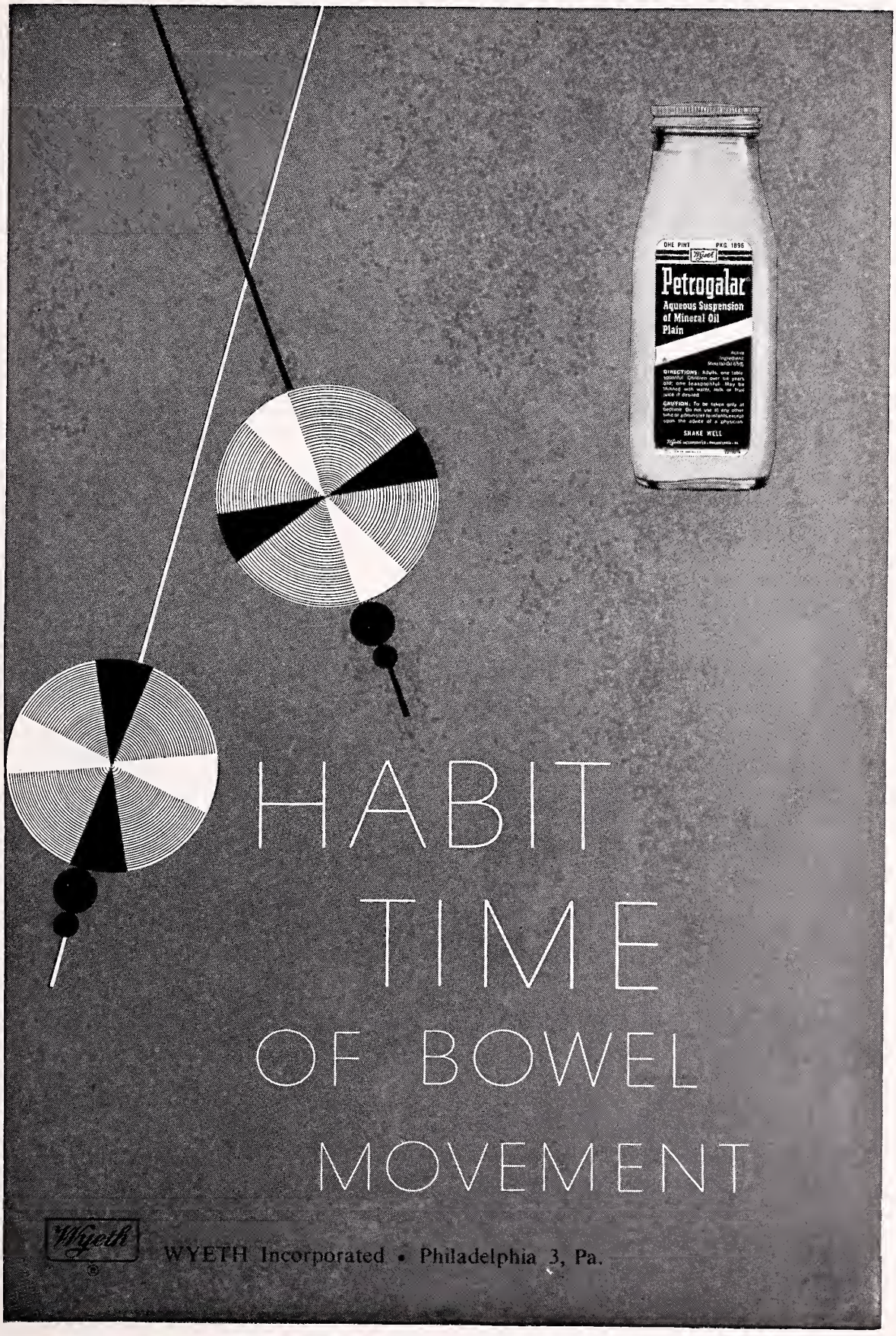
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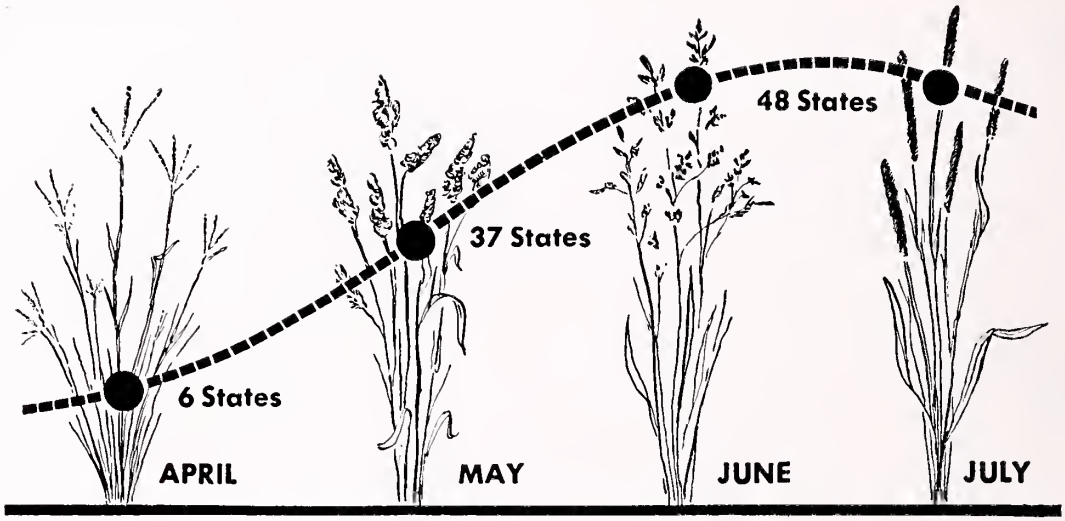
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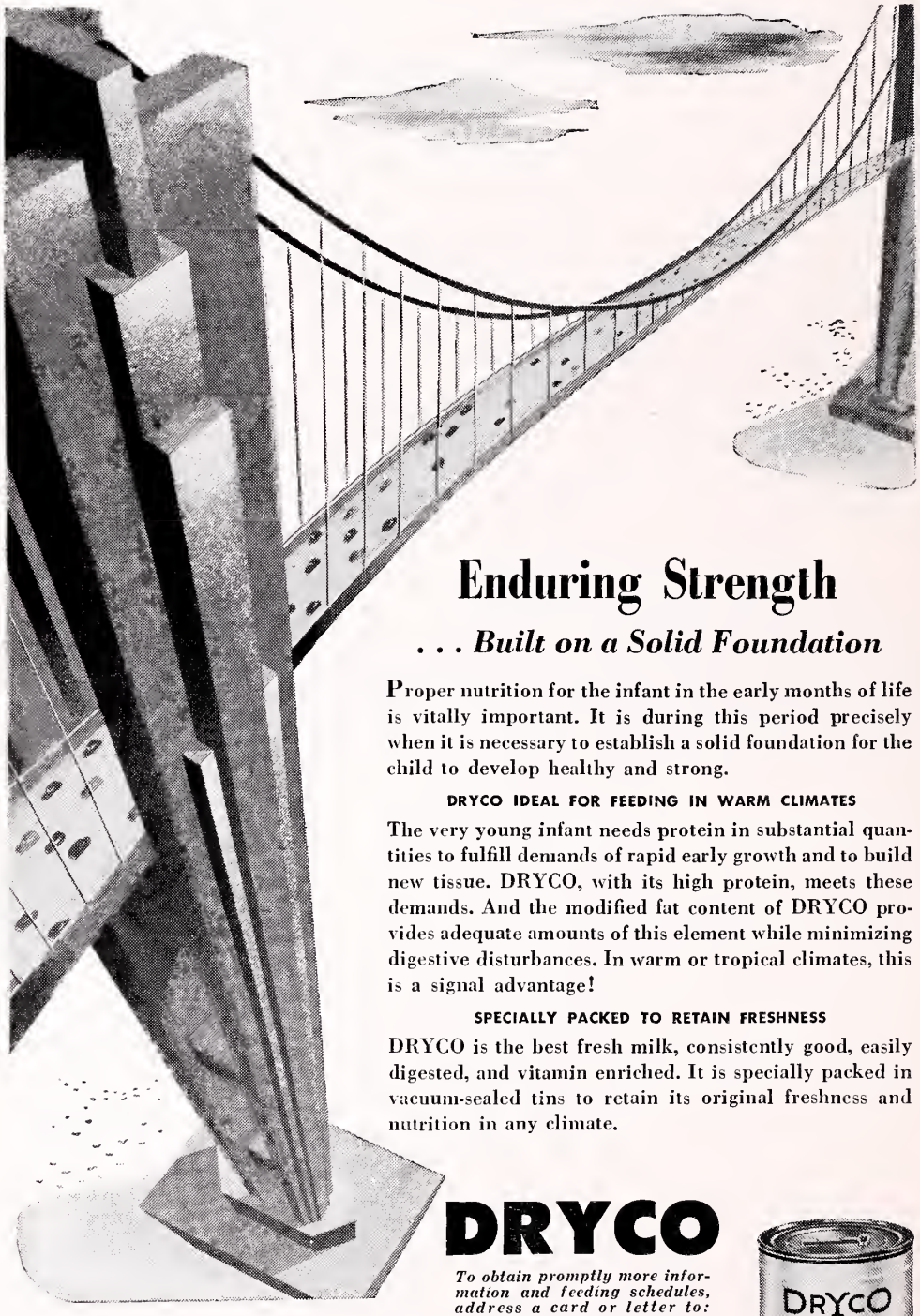
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Medical Aspects of Atomic Warfare

C. L. WILBAR JR., M.D.*
HONOLULU

" 'The time has come,' the Walrus said,
'To talk of many things:
Of shoes—and ships—and sealing wax—
Of cabbages—and kings—
And why the sea is boiling hot—
And whether pigs have wings.' "
LEWIS CARROLL, *"Through the Looking Glass"*

THE time *has* come, I believe, for all medical men in our Territory to talk of and learn about the medical aspects of atomic warfare. This is true not only here but all over the United States.

Atomic warfare is unquestionably more terrible than any type of fighting previously known, and it directly and intimately affects the civilian population. However, there are limits to the extent of its harm, and much can be done by an informed medical profesison and an informed public to appreciably reduce the number of casualties and deaths which may be caused by the detonation of one or more atomic bombs in an area.

Up to now there has been rather meager dissemination in our country of the present day knowledge of scientists and militarists on this subject. So that we may be better prepared for defense against the possible use of atomic bombs on our country by an enemy power, the Atomic Energy Commission, at the request of the National Security Resources Board, has just given courses in the medical aspects of atomic warfare and in radiation monitoring at five different places throughout the United States. The radiation monitoring courses were three or four weeks in length and the medical courses one week. The courses for the western states, Hawaii and Alaska were given at the Atomic Energy Commission headquarters in Los Angeles, with participation in teaching by faculty members of the University of California, Los Angeles.

B. J. McMorrow, sanitary engineer and director of the division of sanitation of the Territorial Department of Health, attended the four-week course ending April 21, and Dr. Guy Haywood, Dr. Casimir Domzalski and I attended the medical course of one week, ending the same day. The governor of each state was asked to select the candidates for the courses but as far as the medical course was concerned, the National Security Resources Board suggested a representative from the state medical society, one from the medical society of a large city, one from the state health department, and, where medical schools or schools of osteopathy existed, a representative from each of those schools.


DR. WILBAR

Dr. Haywood was selected to represent the Hawaii Territorial Medical Association and Dr. Domzalski the Honolulu County Medical Society. Unfortunately, neither of them has returned in time for this meeting, both having been detained on the mainland for other affairs, so it has fallen to my lot to bring to you a brief resume of the plans and teaching on this subject to date.

Our trip was financed by the Territory's Disaster Relief Agency, and Colonel William B. Cobb, director of that organization, is here today. The local and national defense organizations hope to have those taking the course serve as a nucleus for spreading knowledge on this subject throughout the Territory. We are fortunate in that several of the medical officers of the Hawaii National Guard, namely, Drs. Robert Faus, Alvin Majoska and Rudolph Wipperman, also have had the privilege of taking a course in nuclear fission warfare. Dr. Faus, who is also the Hawaii Territorial Medical Association's disaster relief representative, is at present on the mainland attending an American Medical Association meeting on civil defense. Dr. Robert Millard had a similar course last November under the auspices of the U. S. Navy. Dr. John Jenkins is scheduled for training in this subject this month as a National Guard officer.

An atom bomb, made of a critically sized mass of radioactive uranium and radioactive plutonium,

* President, Board of Health, Territory of Hawaii.
Read before the Sixtieth Annual Meeting of the Hawaii Territorial Medical Association, Hilo, Hawaii, May 7, 1950.

may be exploded (1) at a high altitude, (2) on the surface of the ground, (3) under water and (4) underground. As far as was known to our teachers, no experimental data are on record regarding the results of the underground type of explosion. The first bomb detonated was the surface type; it was exploded in the desert of Alamogordo, New Mexico, in July, 1945. The next month the cities of Hiroshima and Nagasaki in Japan were bombed with bursts about 2,000 feet above the ground. The next year, at Bikini, an undersea explosion was tested. Present military thinking seems to indicate that the air blast, as used in Japan, is the most effective in warfare.

Results from the different types of blasts vary considerably. An underwater burst will spray a large area with highly radioactive fission products of the bomb in solution, which will emit gamma rays and beta and alpha particles, but heat effects will be practically absent and blast effects minimal. A surface explosion will cause marked and prolonged radioactivity at the site of the blast (land at the immediate blast site in New Mexico is still highly radioactive) but will not spread heat and blast effects as far as a higher explosion. In the high altitude explosion most of the casualties are due to burns and injuries from physical and mechanical causes. About 85 per cent of the casualties from the Japanese bursts were due to these causes and approximately 15 per cent from penetrating radiation. Thus, preparation for prevention and treatment of large numbers of severe burns and traumatic injuries becomes at least as important as preparation against radiation sickness. Many persons, however, will receive all three types of effects. Hiroshima, with a population of 300,000, about the size of Honolulu, had, as the result of the overhead bomb, 80,000 dead, 40,000 injured, and an estimated 85,000 persons in need of immediate medical care. The utter lack of preparedness of the city for an atomic bomb attack unquestionably resulted in many thousands more deaths than would happen in a prepared city.

The high altitude explosion releases a tremendous amount of penetrating gamma radiation instantaneously. About 99 per cent of the total radiation hazard occurs within the first few minutes and only about 1 per cent of the total radiation activity remains as fission products to contaminate the ground.

Gamma rays are similar to x-rays except that they have a shorter wave length and thus greater energy and penetrating ability. Neutrons, or uncharged nuclear particles, are also released immediately with the bomb burst, but they have a comparatively short range in air, and it is unlikely that injury from these particles would be important. Only those in the central area of the bomb burst would receive appreciable neutron penetration, and they would be unlikely to survive the burn and blast effects. Alpha and beta particles are not initially present in large numbers, nor do they have much penetrating power, but because of their high potency there is grave danger that substances emitting them may be taken internally. The alpha particle, which is a helium nucleus with a double positive charge, has a tremendous ionizing power, 10,000 times that of a gamma ray, but penetrates the unbroken skin to a distance of only 0.04 mm. Therefore, guarding against possible ingestion of any contaminated foodstuff or contaminated water becomes a matter of major concern. Beta particles are electrons, with negative charges, and have (at high velocities) 100 times the ionizing power of gamma rays; the average skin penetration of beta particles is 2 mm.

Thus, we see that the gamma radiation is the major source of primary radiation injury from an air burst, whereas it is necessary to look out for secondary contamination by substances emitting alpha and beta particles.

The exact causes and mechanisms of radiation damage to body tissues are unknown. The major chemical effect of ionizing radiation is oxidation. Hydrogen peroxide is formed, which is damaging to various enzyme systems. In addition, it has been demonstrated that the sulfhydryl group of enzymes is affected by radiation, thereby altering cellular metabolism. This is similar to the action of the antibiotics on the growth of bacteria.

Cells of the body which reproduce rapidly are the most sensitive to ionizing radiation. Lymphocyte-forming areas are the most susceptible, then the granulocyte forming areas, then the epithelial lining of the gonads and gastrointestinal tract, then skin, then connective tissue and, least sensitive, the muscle cells, bone cells and finally nerve cells.

Unfortunately, an exposed individual cannot see, hear, taste or feel radiation penetration, no matter how much he may receive. Diagnosis and prognosis are made from symptomatology, the blood picture and the temperature. Nausea, vomiting, diarrhea, hemorrhage, weakness and loss of hair are apt to occur in that order. Leukopenia starts within twenty-four hours, with first a decrease or disappearance of the lymphocytes and then of the granulocytes. The platelets go down in about two weeks and the erythrocytes in about four weeks. The formed elements of the blood do not seem to be destroyed but the blood-forming tissues are harmed. As one lecturer put it, the fac-

tory is hit rather than its distributed products. Fever often becomes high. With lack of white cells the body's resistance to infection becomes very poor.

It is impossible to go into details regarding radiation sickness, type of burns and injuries peculiar to atomic blasts or even into the little I know of nuclear physics in the short time available today. I hope that what I have said to this point indicates that with a knowledge of the approximate effect and limitations of atomic bombs and what may be expected from their action, the medical profession can greatly reduce the extent of suffering and death which may be caused by such bombs.

Several sound films were shown in connection with our course. Colonel Cobb is attempting to obtain copies of these films for showing in Hawaii. I have passed out to you copies of the list of references given to those of us who took the University of California courses. Most of these publications are readily available.

Discoveries in nuclear physics have opened the way for beneficial uses of radioactive products, particularly radioisotopes of certain elements. We were given some lectures and demonstrations along this line but it does not seem possible to do more with this subject today than mention it.

In conclusion, let me present an outline of factors to be considered in community preparation against attack by one or more atomic bombs. This outline was prepared by your Hawaiian delegation at the end of the course and simply represents our thinking to date on this matter. As we see it the community will need:

(1) A well integrated overall official planning and authoritative organization. The Disaster Relief Agency can be such an organization.

(2) Territorial-wide planning, integrated with national civil and military planning, and especially with the planning of the west coast states. National civil planning is as yet far from crystallized.

(3) Training of all physicians and members of allied health professions in medical aspects of atomic warfare. There can be little, if any, specialization after an atomic attack, so it would seem that all physicians, regardless of their usual type of practice, should be familiar with modern diagnostic and treatment procedures for burns, traumatic injuries and radiation sickness.

(4) Public education as to the extent of risk and what can be done about it.

(5) Training of many radiation monitors in scattered areas of the Territory and procurement of instruments which they may have readily available. These persons might be considered the "first line of defense" against radiation damage.

(6) Readily available large supplies of whole blood, plasma, antibiotics, dressings, splints and other medical supplies needed for atomic bomb casualties. With scores of thousands of casualties, the needs for these supplies run into tremendous quantities.

(7) Training of large numbers of persons to be able to do blood counts, and procurement of instruments which they may have readily available.

(8) Widespread training in first aid.

(9) Basic sanitation plans concerning food, water, sewage disposal, burial, etc.

(10) Designation of casualty collecting stations and base hospitals.

(11) Provision of underground shelters which are large and deep.

(12) Adequate community immunization program.

(13) Other non-health organization and training, such as in fire fighting, convoy driving, communication and policing.

Only by some such planning, study and work can we hope to have a population prepared physically, psychologically and medically for atomic warfare.

List of Publications To Be Used by the Civil Defense Medical Training Course

AUTHOR AND TITLE:	AVAILABLE FROM:
"The Acute Radiation Syndrome In Man" Shields Warren, M.D., and John Z. Bowers, M.D. REPRINT: "Annals of Internal Medicine" Vol. 32, No. 2, February, 1950	National Security Resources Board Washington 25, D.C.
"The City of Washington and an Atomic Bomb Attack"	
"Atomic Scientists News" Vol. III, No. 1, July 21, 1949	
"Atomic Bomb Explosions—Effects on an American City"—R. E. Lapp REPRINT: "Bulletin of the Atomic Scientists" Vol. 4, No. 1, June, 1948	Library Branch Technical Information Division Oak Ridge, Tennessee
"Gross Autopsy Observations in the Animals Exposed at Bikini" REPRINT: "Journal of American Medical Association," Aug. 2, 1947, Vol. 134	
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(Continued on Page 405)

Acute Pancreatitis

ROGERS LEE HILL, M.D.
AND
GROVER H. BATTEN, M.D.
HONOLULU

THE high mortality rate and the difficulty encountered in the diagnosis of acute pancreatitis have resulted in the accumulation of a voluminous literature during the past sixty-one years. The names of Fitz,[1] Opie,[2] Zoepffel,[3] Somogyi[4] and Elman[5] are inseparably bound to the fundamental developments of this dramatic and interesting illness.

Two factors which have markedly influenced the course of events in this malady are the introduction of non-operative therapy, and the development of a dependable and easily performed laboratory test for diagnostic confirmation.

Despite the tremendous number of recorded observations concerning this disease, considerable confusion exists as to the proper treatment of pancreatic necrosis. There seems to be general agreement that the non-operative method of treating edematous pancreatitis, in the acute stage, is the proper method.

Domzalski,[6] Wedge,[7] Straub[8] and Fennel[9] of Honolulu have made contributions of value to the literature on acute pancreatitis.

Case Material

This study is a review of the experience in The Queen's Hospital with acute pancreatitis, over the six year period 1944-1950. The diagnosis has been definitely established in 22 cases, and in each instance proven by one or more of the following methods; exploratory laparotomy, serum or urine amylase determination, or post-mortem examination. It is conceivable that failure to obtain diagnostic enzymatic confirmation resulted in failure to recognize some of the milder forms of the disease.

From the Department of Surgery, The Queen's Hospital.

Read before the Sixtieth Annual Meeting of the Hawaii Territorial Medical Association, Hilo, Hawaii, May 6, 1950.

[1] Fitz., R. H.: Acute Pancreatitis, Boston M. & S. J. 120:181, 1889.

[2] Opie, E. L: The Etiology of Acute Pancreatitis, Bull. Johns Hopkins Hosp., 12:182, 1901.

[3] Zoepffel, H.: Acute Pancreatic Edema, Deutsche Zeitsche. f. Chir. 175:301, 1922.

[4] Somogyi, M.: Micromethods for Estimation of Diastace, J. Biol. Chem. 125:399, 1938.

[5] Elman, R.: Surgical Aspects of Acute Pancreatitis, J.A.M.A. 118:1265, 1942.

[6] Domzalski, C. A.: Calcareous Pancreatitis, Ann. Int. Med. 31: 650, 1949.

[7] Domzalski, C. A., and Wedge, B. M.: Elevated Serum Amylase in Alcoholics, Am. J. Clin. Path. 18:43, 1948.

[8] Straub, G. F.: The Physical Diagnosis of Pancreatitis. Proc. Staff Meet. Clin., Honolulu, 13:67, 1947.

[9] Fennel, E. A.: Amylase Determinations, Am. J. Clin. Path. 14:89, 1944.

Incidence, Sex, Age, Race

There are very few available statistics on the incidence of acute pancreatitis, but it is much greater than is generally recognized. Fallis and Plain,[10] in 1939, reported an incidence of 1 in 10,000 admissions, based on diagnosis determined by operation. Probestein[11] found it to be more frequent, 1 in 600, with the diagnostic aid of amylase determination. Our average of 3.6 patients per year is lower than his 5 per year, in a hospital of comparable size.

TABLE 1.—*Age incidence.*

Age Group	
0— 9	none
10—19	none
20—29	3
30—39	3
40—49	6
50—59	5
60—69	2
70—79	2
80—89	1
Youngest	26
Oldest	85
Average age	48.7

TABLE 2.—*Race incidence.*

Caucasian	13
Caucasian-Hawaiian	2
Chinese	2
Chinese-Hawaiian	1
Filipino	1
Japanese	1
Negro	1
Puerto Rican	1

Acute pancreatitis apparently affects all age groups. In our series the incidence was highest in the fifth and sixth decades. The youngest was 26 and the oldest 85. There were 19 men and 3 women affected, a sex disparity contrary to most published observations. The racial incidence was interesting in that 13 Caucasians were affected as compared to 2 Chinese, 1 Japanese, and 1 Filipino. This racial incidence disparity is out of all proportion to racial population and racial hospital admissions. No reasons are apparent for this disparity.

Pathology

There are two types of acute pancreatitis that are generally recognized; acute pancreatic edema and acute pancreatic necrosis. The pancreatic edema is more common (80 per cent), milder, and doesn't produce hemorrhagic fluid or necro-

[10] Fallis, L. S. and Plain, G.: Acute Pancreatitis, Surgery 5:358, 1939.

[11] Probestein, J. A., Gray, S. H., Sachar, L. A., and Rindskopf, W. J.: Surgical Implications of Acute Pancreatitis, Arch. Surg. 59:189, 1949.

sis. We recorded 9 cases of pancreatic edema and 13 of pancreatic necrosis. This discrepancy probably resulted from our failure to recognize many of the milder forms which mimic gastro-enteritis or other non-fatal abdominal disorders.

Diagnosis and Clinical Picture

An interesting revelation was the fact that the clinical picture was not sufficiently characteristic to suggest the correct diagnosis in 14 cases. This diagnostic difficulty and inaccuracy corresponds very closely to that recorded in the literature. As one would suspect, perforated ulcer was the most frequent incorrect diagnosis made. Other diagnoses were stone in the common duct, acute cholecystitis, intestinal obstruction, acute appendicitis, intra-abdominal abscess and bleeding peptic ulcer.

The failure to establish a correct diagnosis prior to operation suggests that either the value of amylase determination was insufficiently appreciated, or that the symptoms mimicked other diseases so closely, or that an alertness to the possibility of pancreatitis was not developed.

The mistaken diagnoses occurred more frequently in the necrotic type than the edematous type. An examination of the records reveals that amylase determinations were not performed in 12 cases.

The classical case, exhibiting the dramatic symptoms popularly associated with acute pancreatitis, was infrequently admitted to The Queen's Hospital. Undoubtedly this influenced the 63 per cent incorrect diagnoses made. Only 2 patients were in a state of peripheral circulatory collapse. Fifteen of the patients had symptoms for twelve hours or longer, prior to admission, illustrating the moderateness of the symptoms at onset.

The symptoms did not reveal a characteristic pattern that would suggest a bedside diagnosis, without amylase determination, in a large majority of cases. The pain was located in the epigastric region 11 times and generalized over the abdomen 5 times. Tenderness and rigidity were more variable, board-like rigidity occurring only twice in the series. Nausea and vomiting occurred in 16 cases and was absent in 6. The temperature was normal or subnormal in 17 cases and in 5 ranged from 100 to 102° F. The leukocyte count was normal in only 3 patients, and elevated in 19, with an average of 19,250. The time of onset and relationship to food intake was frequently not indicated in the records, but significantly night onset was noted in 6 cases, and in 6 cases onset followed either an alcoholic bout or a heavy meal. Cyanosis was noticed twice, but in no instance was umbilical or flank discoloration described.

The illness was described as stormy or severe in 14 cases, and moderate or mild in 8 cases, corresponding closely to our classification of edema and necrosis.



DR. HILL

Roentgenographic findings, blood calcium, electrocardiographic changes and blood sugar were either infrequently obtained or proved to be of no diagnostic or prognostic value.[12] While the urinary amylase determinations are thought to be less sensitive and less indicative of the disease, they were of great value in 5 cases, due to the more rapid fall of the serum amylase to normal, with persistence of high urinary amylase.

Associated Extra Hepatic Biliary Disease

The association of extra-hepatic biliary disease and acute pancreatitis has been emphasized by all authors who have written on the subject. The incidence of association has varied from 3 to 62 per cent. In each report, however, it was noticed that a substantial number of cases of acute cholecystitis without calculi were included, an observation and a statistical inclusion we believe to be misleading. We believe that this acute cholecystitis was often a secondary inflammation as a result of the pancreatitis, and could be demonstrated in other adjacent viscera; consequently, we have recorded separately the biliary tract complications that exhibited definite pathological changes and could in no way be attributed to secondary involvement.

In 22 per cent of our cases there were either chronic cholecystitis, stones in the gall bladder, or common bile duct, or various combinations of the types. If one includes the cases of reported acute cholecystitis without calculi, the incidence rises to 36 per cent.

If one divides the pancreatitis into the two usual types, hemorrhagic and edematous, and compares the associated biliary tract complications, a marked difference is noted. Only one case was present in the hemorrhagic group, while 4 were present in the edematous group.

Other Contributing Factors

Alcohol.—Ten patients (45 per cent) admitted

[12] Paxton, J. R., and Payne, J. H.: Acute Pancreatitis, Surg. Gynec. & Obst., 86:69, 1948.

Edmundson, H. A., and Berne, C. J.: Calcium Changes in Acute Pancreatic Necrosis, Surg., Gynec. & Obst. 79:240, 1944.

Gottesman, J., Costen, D., and Beller, A. J.: Changes in Electrocardiogram Induced by Acute Pancreatitis, J.A.M.A. 123:892, 1943.

heavy alcohol consumption over a protracted period. In 11 cases the alcoholic intake was not recorded and 1 case was recorded as a total abstainer.

Trauma.—Trauma was not a contributing factor in a single case as far as could be determined.

Treatment

We have had the opinion for some time that misleading statistics on acute pancreatitis have resulted in undue emphasis on the conservative form of therapy. Undoubtedly, the statistical comparisons of the two forms of therapy have been influenced by the increased recognition of the milder forms of the disease by amylase determinations. Another influential factor is that the conservative method has been practiced in the past decade, a period of general reduction in mortality rate due to many therapeutic adjuncts. The operative period was more popular during a period when these adjuncts were not available. Rhoades,[13] by using the operative method frequently, has recently reported a reduction in mortality rate from 18 per cent to 3.2 per cent during the last 5 years. We have no quarrel with the conservative treatment, and are in agreement with its general initial use. However, we believe that its protracted use, or continuation after symptoms have failed to subside, will result in some deaths that might be prevented with timely surgical intervention. There can be no argument with this statement if one considers complications, such as abscesses or cysts, which occurred in 10 per cent of our cases.

Morton[14] and Elman have repeatedly stressed the fact that while conservative therapy is the procedure of choice in edematous pancreatitis, this is not applicable to the necrotic type, where operative therapy produces a much lower mortality rate. Our statistics appear to substantiate their contention. Operative mortality in pancreatic necrosis was 22.2 per cent and conservative mortality was 75 per cent.

The only death in the acute pancreatic edema group, treated by either method, occurred in an 85 year old man, who died on the twenty-second day, after refusing surgery. Autopsy revealed a stone in the common duct. While we are in agreement with the popular conception of conservative therapy in edematous pancreatitis, we would like to point out that 44 per cent of our cases exhibited biliary tract complications of sufficient magnitude to warrant operative intervention in the future.

There is general agreement that the differentiation between hemorrhagic and edematous pancreatitis may be impossible in the early stages. It has been customary to classify the case with mild onset of symptoms as edematous pancreatitis. Although this does not always hold true from a practical standpoint, it means that a conservative regimen is indicated and will be generally successful. The fact that some of the patients with severe symptoms are in no condition for an emergency operation, while others show early subsidence of symptoms under conservative treatment, associated with our statistics which reveal a higher mortality if the operation is performed in the first thirty-six hours, signifies that conservative therapy is indicated for the first few days in all cases of acute pancreatitis. Examination of our statistics further reveals that 3 of the conservatively treated patients expired after the fifth day which might suggest that an early operation was indicated in case of failure of symptoms to subside. The problem then resolves itself into the selection of the proper time for operative intervention in the severe case whose symptoms fail to subside under a conservative regimen. This is necessary in order to lower the mortality rate and prevent complications such as abscesses or pseudocysts, which occasionally occur under a prolonged non-operative regimen. It would appear from our statistics that the proper time for decision as to operative intervention might very well be the third day. The operation of choice is simple drainage of pancreatic region or biliary decompression, if indicated.

TABLE 3.—*Mortality in relation to type of disease and treatment.*

	Died	Per cent	
ACUTE PANCREATIC EDEMA			
9 cases	1	11.2	
5 cases with operation	0	0	
4 cases without operation	1	25	
ACUTE PANCREATIC NECROSIS			
13 cases	5	38.4	
9 cases with operation	2	22.2	
4 cases without operation	3	75	
ACUTE PANCREATITIS			
22—Total number of cases	6		
Overall mortality rate		27.2	
9 cases operated within 36 hours	2		
5 cases delayed operation 6 to 12 days	0		
CONSERVATIVE TREATMENT			
1 for 28 hours	1		
1 for 5 days	1		
1 for 6 days	1	(Jaundiced)	
1 for 22 days (Refused operation)	1	(stone in common duct—autopsy)	

1—Lived—refused operation—gall bladder stones.
3—Lived—recovered.

TABLE 4.—*Associated extra-hepatic biliary disease.*

	EDEMATOUS PANCREATITIS	ACUTE HEMORRHAGIC PANCREATITIS
Chronic cholecystitis	1	0
Cholelithiasis	2	1
Stone in common duct and chronic cholecystitis	1	0
TOTAL	4	1

[13] Rhoades, J. E., and Howard, J. M.: Clinical Experiences with Surgical Lesions of the Pancreas, S. Clin. North America, 1801 (Dec.) 1949.

[14] Morton, J.: Acute Pancreatitis, Surgery 17:475, 1945.

It should be emphasized, that while amylase determination is a reliable test, in the diagnosis of acute pancreatitis, it cannot replace good clinical judgment in selective therapeutic management. Individualization of each patient is strongly urged. To illustrate with a brief case report:

Case Report

A 44-year-old Filipino man was admitted to The Queen's Hospital, with what appeared to be a characteristic attack of acute pancreatitis. He had severe abdominal pain, moderate shock, board-like rigidity and a markedly elevated serum amylase. The only disturbing factor was an unexplained anemia. Conservative regimen, with proper blood replacement, resulted in a typical subsidence of symptoms, and he was discharged on the ninth day. The blood amylase had returned to normal. A similar episode occurred in a few days and an emergency operation, after blood replacement, revealed a peritoneal cavity filled with blood. A 2 inch rent was discovered in the mesentery of the transverse colon which communicated with a moderate sized cavity in the head of the pancreas. A large artery was bleeding profusely in the pancreatic wall of the cavity and was ligated with some difficulty. No evidence of pancreatitis could be found and the cause remained obscure. The only traumatic history that could be elicited was a fall six years prior to admission, and there was no interim symptomatology. He was discharged with a diagnosis of pancreatic apoplexy resulting from a traumatic aneurysm or an eroded vessel secondary to pancreatitis.

Comment

The important point we would like to emphasize is that without good clinical judgment the elevated amylase could have very easily influenced the therapeutic management by continuation of conservatism to the detriment of the patient.

The conservative therapy in our series was not always the recommended type and it is our opinion that considerable emphasis should be placed on penicillin therapy, fluid and blood replacement, continuous gastric suction, and large doses of atropine to prevent pancreatic stimulation.

We would like also to emphasize that the small number of cases in this series militates against the formulation of authoritative opinions or decisive conclusions, but it is our hope that the data presented here will be useful in the future treatment of this interesting disease in Hawaii.

Summary and Conclusions

The data on 22 patients with acute pancreatitis, admitted to The Queen's Hospital during the past six years, are reported. There were 9 cases of acute pancreatic edema and 13 with pancreatic necrosis.

The physical characteristics of the disease revealed a predominance of heavily built Caucasian males in the fifth or sixth decade, with sudden onset of epigastric pain, nausea, vomiting, tenderness, normal temperature, leukocytosis (19,000), and normal blood pressure. Ten patients (of 11 questioned) admitted excessive alcoholic consumption. Twenty-two per cent of the patients revealed extra-hepatic biliary disease.

An overall mortality rate of 27.2 per cent was recorded.

An incorrect diagnosis was made in 63 per cent of the cases.

Amylase determinations have been valuable in expanding the diagnostic scope, and should eliminate many of the operations used in the past to establish a diagnosis.

Conservative therapy is the proper method for treating all cases of acute pancreatitis at the onset, with special emphasis on penicillin therapy, fluid and blood replacement, gastric suction and atropine for inhibition of pancreatic secretion.

Operative therapy should be reserved for the complications such as abscesses and cysts and it should be seriously considered in the necrotic type if the symptoms fail to subside by the third day on proper conservative management.

Young Hotel Building.

The Hawaii Medical Service Association

LYLE G. PHILLIPS, M.D.
HONOLULU

FORTY-SIX THOUSAND FIVE HUNDRED persons, or nearly nine per cent of the population of Hawaii, are members of the Hawaii Medical Service Association — in other words, pay premiums to HMSA to insure themselves against at least a part of the expense they will incur in case of illness.

During 1949 there was a 38.4 per cent increase in the number of memberships. There is every indication that this growth will continue.

These facts are mentioned primarily to impress upon you that, more and more, your practice and your relationships with your patients will be influenced by the Hawaii Medical Service Association — that, more and more, your professional activities will be subject to the terms and circumstances by which and under which the Hawaii Medical Service Association contracts with your potential patients to provide to them medical, surgical, and hospital care. These facts are mentioned to impress upon you how important it is that you have full understanding of the Hawaii Medical Service Association, of its importance to the community and to each of you personally; and that each of you be prepared, through such understanding, to lend your influence to insure, first, that the policies of the Hawaii Medical Service Association are sound, and, secondly, that the members of the profession shall stand firmly behind the Association, once those sound policies have been adopted.

Perhaps it is appropriate at this time to review the history and to examine the purposes of the HMSA.

This organization came into being in 1938 following a two year study by committees representing the medical profession, a group of educators, and a group of social service workers. It was organized and has continued to function as a medical *service* association, as contrasted with the usual commercial insurance organization which reimburses its clients on a basis of specific indemnities for specific sickness or accident entities.

The basis of its operations are two sets of contracts.

The first, executed with persons insured in the Association, obligates the HMSA to provide medical, surgical, and hospital services in accordance with the terms of the policies issued.

The second contract is between the HMSA and the Honolulu County Medical Society, with concurrence of the other county medical societies of the Territory. In this contract, the medical societies, on behalf of their members, agree to furnish medical service to the members of the HMSA at rates of compensation set forth in a schedule of fees and in accordance with other provisions mutually agreed upon; and the HMSA agrees to compensate the members of the county societies for services covered by its policies.

Although many mainland plans have been organized and operated by doctors themselves, the HMSA was so set up that its governing board of directors represents not only the medical profession, but employer and employed groups as well. Ten physicians, elected by the profession to represent it, are presently members of the HMSA board of directors. Two of these doctors are members of the Executive Committee of the Board.

The present contract between the HMSA and the Honolulu County Medical Society was originally executed in 1941, and, in accordance with its terms, has been automatically renewed each year, no intention to the contrary having been indicated by either party to the contract.

The medical profession indicated special interest in the success of the HMSA in the original contract by agreeing that 20 per cent of its members' fees should be withheld by the HMSA as a so-called "physicians' reserve" with the provision that the reserve fund should "be used *First,* for the payment of one-half the salary of the Medical Director; *second,* to meet any deficiency in administrative or operating expense of the HMSA; and *third,* that after a period of one year from date the balance of said reserve fund shall be returned to the Medical Society, or if requested by the Medical Society, shall be pro-rated among those members of the Medical Society who have rendered service . . . in proportion to the amount of bills for such service."

This underwriting of the HMSA by the medi-

Read before the Sixtieth Annual Meeting of the Hawaii Territorial Medical Association, Hilo, Hawaii, May 7, 1950.

cal profession was considered necessary because at that time there was no experience available on which accurate premiums could be based; and there was a tacit understanding that as soon as possible the financial safety of the HMSA should be assured by proper adjustment of premiums and benefits, and should not continue to be a financial responsibility of the participating physicians. In fact, the withholding was reduced several years ago to 10 per cent, but has remained at that figure since.

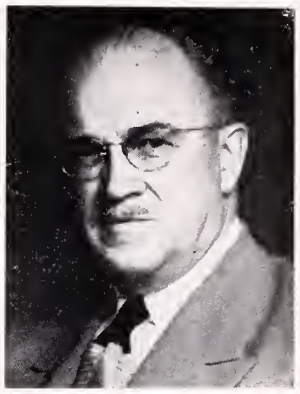
Up until 1949, no part of this physicians' reserve was used by the HMSA to meet a deficit, as the HMSA experience was financially satisfactory and there were no deficits.

The medical profession's particular interest in the HMSA arose from its conviction that the problem of the inequalities of the costs of illness could be satisfactorily met by the provision of voluntary insurance which would make possible budgeting, particularly against the expense of major illnesses. Here, as on the Mainland, this type of insurance and its ready acceptance by the public have been a major defense against state or political medicine. In fact, the HMSA, three years ago, provided the answer to the attempt to enact a territorial sickness tax measure; and it continues to be our best answer to those who would foist socialized medicine upon our people.

In short, we of the medical profession are, I believe, irrevocably a part of the HMSA; we are committed to working for its success; and each of us has a considerable personal stake in its operations.

It behooves us, then, to study it well, and through our representatives on its governing body, to use our influence to shape its structure wisely.

Two years ago, it became apparent that if the HMSA were to grow and grow successfully to fufill its purpose to the community and the medical profession's expectations of it, a reorganization was necessary and certain basic changes must be made. At that time an intensive study was made, in which Jay Ketcham of the Michigan Plan, and Allen B. Thompson, vice president and chief actuary of the Associated Hospital Service of New York, were brought to the Islands to give advice. A committee presented a reorganization report, many of the provisions of which provoked controversy. However, a new plan was inaugurated, approved by a majority of the members of the Board. A promotion effort resulted in marked growth of the plan from the standpoint of numbers of persons covered—and this in spite of the pineapple companies' withdrawal from the plan.



DR. PHILLIPS

As of February 1, 1950, 43,843 individuals were insured in HMSA. Of these, 38,191 were covered in Plan I or the so-called "Full Coverage Contract." Hospital insurance only was carried by 2,693 individuals. A contract providing for hospital costs and medical costs for hospitalized illnesses insured 386 persons. Plan IV, or the so-called "Community Enrollment Plan" includes 158 individuals. A modified plan which was made available to employes of the Mutual Telephone Company and which is comparable in most respects to the "Full Coverage Plan" covered 2,425 persons.

The auditor's report for the year 1949 indicates total HMSA receipts of $881,381.82. The sum of $708,227.93, or 81.32% of the premiums collected, was paid to physicians and hospitals in benefits. Operating expenses amounted to $218,-103.27 or 25.82%. There was, therefore, a net operating loss of $44,949.38.

Scheduled assets as of December 31, 1949, consisted of $96,102 in cash; $164,105 invested in stocks and bonds; and other assets such as equipment, etc., bringing the total to $293,012. Included in this figure was $46,630 in the physicians' reserve.

Obviously this experience is not satisfactory. Its correction has been undertaken by the Executive Committee, the Board of Directors, and the management. Basis for these corrective measures has been a thorough analysis of the experience of 1949, in which information made available through the recently installed IBM machines has been invaluable.

From this analysis it has become apparent that premiums must be increased if the benefits provided under present policy holders' contracts are maintained. While no immediate gross change in the nature of the HMSA plan is contemplated, it has also become apparent that leaks must be stopped by a closer interpretation of the benefits provided. In other words, the situation will be corrected, it is hoped, by proper adjustment of premiums to benefits.

In the meantime, a deficit has been incurred; this deficit has continued into the present year's operations; and it may well be that some portion of the physicians' reserve may be needed to main-

tain the plan's financial solidity. This, I may remind you, is in accord with the contract which exists between the HMSA and the medical societies.

There have been some differences of opinion as to some of the basic features of the plan as it now exists. These have concerned especially the medical aspects of the plan, or more particularly what is referred to as the "house and office visit" features. The majority of the board has vigorously insisted that these provisions be retained. Experience will prove whether this is sound practice. The members of the profession are requested to be patient along with those doctors on the board who have expressed doubts, until such experience in convincing degree is available.

Some changes in fee schedule have long been under consideration. I am sure that the Board of HMSA will concur in a reasonable schedule; but it must be remembered that changes in fees must of necessity be reflected in changes of premium structure and this can not be done frequently or easily. It is most important that the new fee schedule be as nearly satisfactory as possible and be adopted with a long-range view.

I regret to inform you that there have been abuses of the plan, and that certain physicians, as well as policyholders, have been guilty of these abuses. The number of these erring physicians has been small, but their actions have been a reflection upon the rest of the profession. Such abuses inevitably place the doctor members of the Board of Directors at a grave disadvantage in dealing with management and the lay directors of the organization. If each of you, in submitting claims to the HMSA, will exercise the same restraint and invoke the same measure of fair dealing that you would employ if you were billing a private patient who would pay his own bill, there will never be a complaint.

Much misunderstanding and much discontent has been engendered by physicians undertaking to interpret HMSA policies and liabilities to their patients. Often, and quite understandably, a doctor has felt called upon to go to bat for his patient over an HMSA claim. The result has been unpleasant for all concerned. Policy holders are entitled to certain benefits defined in their policies. Those benefits are limited to what the premiums paid can cover. I agree that insurance jargon is sometimes difficult to understand, and sometimes sounds different when a policy is being sold and when a claim is being made. But, the claimant should deal directly with the HMSA, where full and accurate information is available, and where, in case of need, our representative, Dr. Robert Faus, Medical Director, will use his efforts to see that a fair interpretation is available and that misunderstandings are avoided.

You will save trouble for yourself and your patient, your time will be saved for more important things, and your adrenal glands will secrete more satisfactorily if you will tell your patient that you aren't an expert at interpreting insurance contracts, and that you are sure he will secure full satisfaction if he communicates directly with HMSA, which employs a staff just for the purpose of ironing out difficulties.

In conclusion may I say that neither the HMSA management, nor its Board of Directors, nor the doctors who represent you on the HMSA Board have all the answers. Nor have the Blue Shield and Blue Cross plans on the mainland. They are having their difficulties and there are disagreements over what should and should not be done. It may be that, after all, service plans present difficulties which may make their abandonment in favor of indemnity plans the course of wisdom. Experience and experience alone will give the correct answers. Convictions that I firmly hold today I may have to give up or modify next year, as experience and its lessons accumulate.

But in the meantime, the people of the Territory of Hawaii need HMSA or its equivalent. The medical profession needs it above all as the perfect defense against the dreamy-eyed or red-tinged proponent of the medicine of the welfare state.

Your understanding cooperation is solicited.

Hotel and Miller Streets.

A Lost Art in Obstetrics

E. F. CUSHNIE, M.D.
HONOLULU

THE USE of the phrase "Lost Art in Obstetrics" refers to an N.S.D., i.e., normal spontaneous delivery of an uncomplicated case with a minimum of interference, mechanically or psychologically, by those in attendance.

The question in mind is whether the N.S.D., or normal spontaneous delivery, can survive in this so-called progressive age of obstetrics, with the aura of cesarean sections, forceps, anesthetics, Rhead's mental adjustments, and even hypnotism, played for all they are worth to laymen and M.D.'s alike. I sometimes feel we are rapidly losing our obstetrical skill and patience to deliver a mother by natural processes without beclouding the issue and surrounding it with a false aura of intelligence.

The fine doctors, with their knowledge of complications, who gather in hospitals and groups to protect a mother and child from the inexperienced practitioner, now find themselves having trouble trying to save the N.S.D. from the clutches of their own fellows who are too cesarean- and forceps-minded. All this has gone to great lengths, with boards, closed hospitals, and hospital staffs so confused with their own efficiency that the physical and mental comfort of the patient in many cases is ignored, thereby defeating some of the high aims of these pioneer doctors.

As some one has said, one cannot reckon accurately the date and hour when labor should take place, and God can so confuse the wise that no man can boast his wisdom. Likewise, in the progress of labor let no one say, "'tis now the time for forceps," if nothing indicates it but the doctor's own satisfaction or pressure from patients' relatives—or maybe because of a little prompting from the nurse or resident in the delivery room, who says "Your patient has been in labor for eight hours and hasn't delivered. What are you going to do about it?" If the answer is "Nothing," rule 14 is invoked, which states: "Get some one else in to help you . . . find something." A few incidents like that, and one will try to deliver on schedule. Maybe a forceps or maybe a section or a version . . . all that's needed is to find an excuse, maybe maternal fetal disproportion, and the patient is delivered . . . at least, the fetus is not in the uterus.



DR. CUSHNIE

Science Versus the N.S.D.

The procedures of obstetrics date from the beginning of human life, or any life, for that matter; but for thousands of years it was one of the crudest of arts. There was no science during this time, and without any scientific background there was obviously no material progress. There is little that can be found in the times of the Greeks in relation to obstetrics even if the credit does go to them for the foundation of logical medicine. If the Romans, during their glorious reign, had contributed anything to obstetrics, it certainly was lost during the dark ages which followed their fall. It is said that during this period obstetrics was almost as cruel as the rack and wheel; it has been called the darkest age in the history of woman.

In the 16th century, version was introduced, and a little later, forceps. These methods were a Godsend during this period, and still are. However, like all useful things, they have led to abuse, with injury to mother and child, from that day to this.

The forceps—one of the first offenders against the N.S.D.—is still on the scene, and rightly so when used correctly. It is said to have been discovered in the late 16th century by Peter Chamberlen, the first of the Chamberlens who for four generations practiced midwifery in England. It was in 1670 that Hugh Chamberlen convincingly demonstrated the injudicious use of the forceps, when he went to Paris to introduce the "tongs" to the great French obstetrician, Maurceau. It may have been a difficult case; at any rate the result was unsuccessful, for both mother and child

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died. The trail of the forceps has been long and dreary, with other failures like that of Hugh Chamberlen. Dr. Peter Chamberlen, the rascal son of Peter, the elder, who discovered the forceps, finally sold them to a Dutchman. Interestingly enough, he delivered but one blade to the buyer, still hoping, I guess, to keep them a secret. Perhaps less damage would have been done if some of us, and others that came before, when in a hurry, had been given one blade to work with instead of two. In all this time, from the day the Chamberlens discovered the forceps, they have been used to great advantage, especially in times when sections were not done and there were no anesthetics or antibiotics available. Yet with all the good, there has been much bad. Even today, the poor results are present, though we have apparently little excuse for them. It is noteworthy that the young interne and resident are eager to know *how* to use forceps—however, I feel that they should be more concerned *when* to use forceps, and how to do without them. The second of the offenders against the N.S.D.—the version and extraction—has worked interchangeably with the forceps. Its history is no better, and may be worse.

Another offender against the N.S.D. is the cesarean section, which has been in existence for a long time. In 1285 A.D. it was advocated for the purpose of saving a living child on the death of the mother. In 1500 Jacob Nufer, a swine gelder living in Switzerland, operated with success upon his own wife, after delivery had failed. Mother and child lived. Dr. Jesse Bennett, a country practitioner in Virginia, did the first cesarean in America. Porro, of Pravia, in 1876, observed that a woman had died because of loss of blood and sepsis. Because of this observation he later successfully removed the uterus from the abdominal cavity to prevent hemorrhage and sepsis. Sanger, of Prague, is given the credit for perfection of the cesarean operation as we know it today.

There have been changes in asepsis and technique right up to the extraperitoneal sections of Waters and Norton and others. Even so, with all the improved techniques and with blood and antibiotics, there is still danger subjecting the patient to unnecessary surgery, as we all know. Whitridge Williams, one of the late professors of obstetrics at Johns Hopkins University, said, "Anyone with two hands and a few instruments can do a cesarean section—it frequently requires greater intelligence not to do it." And some one else has said that there are those who are so surgically minded that they have forgotten the existence of a birth canal and think that delivery from below is a makeshift to be used only by those who do not do surgery or are too backward to recognize the modern trend.

Delivery Room Procedures

Having dispensed with three of the foremost offenders of the N.S.D., forceps, version and section, I shall touch lightly on the tenor of the delivery room staffs. Suffice to say that I feel as long as the rectal examination is the predominating instrument in the delivery room, and since many of the doctors see the patient only when the head is crowning, there will be little attention given to the other important findings. Everything on an obstetric board has a right to be there; but as one goes down the line there's little to be seen about the patient's general condition, mentally or physically; but the mechanical progress is tabulated in true mechanical style. And that's about all one gets from some of the supposedly well-run delivery rooms.

Conclusion

I don't mean to be too critical, because there are many sides to every question, but I do feel the N.S.D. has in some cases had to fight a bit too hard to live, or should I say, live in spite of us. I would be the first to throw it out, if any safer way were to be found. It is heartening to have been with a master clinical obstetrician for a short time in the person of Dr. Samuel Cosgrove of Margaret Hague Maternity Hospital, who has the touch of intelligent conservatism and, though surrounded by exceptional surgeons at his command, still believes in the N.S.D., and yet carries on without hesitancy to do what is necessary surgically or with forceps when conditions really call for them. There are Dr. Cosgroves all over the country, and I am sure also in Honolulu, who still feel there's a place for a normal spontaneous delivery.

Young Building.

The More Common Blood Dyscrasias Seen in General Practice

THOMAS F. FUJIWARA, M.D.
HONOLULU

FOR PRACTICAL purposes, the diseases of the hemopoietic system may be divided into three broad categories: (1) disturbances in the production, function and destruction of the red cells, (2) similar disturbances in the white cells, and (3) abnormality of the platelets and other factors concerned with the clotting mechanism of the blood. One is frequently confronted with a patient presenting one, two or all three manifestations of some disturbance in the hemopoietic system. They may accompany some other known disease, or occur independently, and will frequently demand all the ingenuity and resources of the physician to determine the nature of the condition; its cause, if any; and the means of managing it. It is impossible to cover the entire field adequately in such a short time. Therefore, I shall present a rather broad discussion on the more common conditions, some of the principles involved in determining their nature, and a few remarks regarding their management.

Disturbances of the Red Cells

Anemia is a symptom of some underlying process. Since all anemias are secondary to some underlying pathological physiology, there is no need to classify anemia as primary or secondary. When one is confronted with such a case, the nature of the anemia may give some idea as to the probable cause or causes. In the majority of instances, simple morphological differentiation will be found to be most useful in limiting the probable etiology.

The Normocytic Anemias

If the anemia is of a *normocytic* type, as determined by a normal color index, normal mean corpuscular volume, or normal cell diameter by actual measurement and plotting of the Price-Jones curve, it may generally be attributed to some disturbed function of the bone marrow. Such a disturbance may result from a reduction of the normal marrow tissue due to varying degrees of bone marrow hypoplasia of unknown etiology, commonly referred to as "aplastic anemia," or actual destruction of the bone marrow by various agents, the more common offenders being radioactive substances, arsenicals, benzol products and heavy metals. Reduction of marrow cells may also result from replacement by metastatic tissues such as cancers, Hodgkin's disease, leukemia, histiocytes involved in abnormal lipoid metabolism, and connective tissue, such as seen sometimes in the later stages of polycythemia. Myxedema may also impair its function. Normal type of cells are found in this group of anemias, because the fault lies only in the quantitative deficiency of an otherwise normally functioning hemopoietic tissue.



DR. FUJIWARA

The management consists of removal of the cause or causes, if possible, and supplementing the deficient supply of blood cells by repeated transfusions. Unless the patient's diet is grossly inadequate, there is no necessity for loading him up with expensive multivitamins and liver injections, etc. Perhaps this group constitutes the most mistreated patients having a blood dyscrasia.

The Microcytic Anemias

The *microcytic* type of anemia presents a low color index, subnormal mean corpuscular volume and a preponderance of smaller cells by direct observation of the blood smear or a shift to the left in the Price-Jones curve. In the majority of cases, it is also hypochromic, because of the smaller sized cells and accompanying deficiency in hemoglobin. The cause of the anemia usually lies in an inadequate intake of substances necessary for hemoglobin production, abnormal absorption of the material or excessive blood loss. Generally, more than one factor is involved.

In this group, the correction of the causative factors will result in improvement of the anemia. It may be worthwhile to point out that, since there is no defect in the maturation of the red cells, the administration of liver extract principles will be of no value. Only the simple ferrous salts are needed, and most of the fancy shot-gun prepara-

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tions only add unnecessarily to the cost of the therapy.

The Macrocytic Anemias

The third group consists of the *macrocytic* anemias. Morphologically, the cells are larger than normal, the mean corpuscular volume is greater than normal and the color index is usually greater than one. The abnormality lies in a disturbance of maturation of the red cells caused by a quantitative deficiency of the liver extract principle, which is believed to be closely related to, or identical with, the recently discovered vitamin B_{12}. The deficiency may arise from inadequate dietary intake of food containing the vitamin B_{12}, or a fault in the absorption and storage of the hemopoietic principle. It has been recently discovered that adequate amounts of intrinsic factor normally secreted by the fundic glands of the stomach are necessary for the proper absorption of the hemopoietic vitamin. Pernicious anemia results when this factor is lacking.

Lesser degrees of malabsorption of the hemopoietic principle have been found to occur after extensive removal of the proximal portion of the digestive tract, digestive disturbances associated with idiopathic steatorrhea, tropical and nontropical sprue, pancreatic diseases, and other prolonged diarrheal conditions. In patients infested with the fish tapeworm, Diphyllobothrium latum, it is of interest that macrocytic anemia occurs only when there is infestation of the jejunum.

Extensive liver diseases of long duration have been frequently designated as a third link contributing to the production of this deficiency state. The liver is believed to play an important role in the storage and metabolism of the hemopoietic principle for use by the bone marrow. However, since the degree of liver damage necessary to produce this deficiency is incompatible with life, the type and degree of anemia accompanying liver diseases have been found to vary more with the other factors mentioned above.

Since macrocytic anemias are generally due to a deficiency of the maturation factor, administration of the liver extract principle will result in a more normal production of red cells. As a rule, the more purified liver extracts or vitamin B_{12} should be used in the treatment of pernicious anemia, and crude liver extract or concentrated brewer's yeast for the more general deficiency states. It may be well to emphasize that folic acid alone will not cure or even arrest the progress of the neurological changes in pernicious anemia.

Miscellaneous Anemias

Although most of the anemias will be found among the three groups mentioned above, there are a few others which must be differentiated by attention to factors other than those already described.

The disease in one of these groups results from excessive hemolysis of the red cells, which may be either due to a defect in the make-up of the cells, causing them to become hemolyzed more readily, or due to the action of hemolysins present in increased amounts in some of these patients. The defect in the former is familial in nature, whereas the latter is not, and is commonly referred to as the "acquired type" of hemolytic anemia. Except for the presence of large numbers of spherocytes, which are abnormally fragile in hypotonic saline solution, and the absence of demonstrable hemolysins or hemolytic antibodies, in the familial type, the clinical picture is similar in these diseases. There is a profound anemia accompanied by an increase in the products of hemolyzed blood in the blood stream and excreta. There is also evidence of accelerated red cell production in the form of increase in the reticulocytes and over-activity of erythroid series of cells in the bone marrow. In addition to the differences mentioned, another distinction lies in the marked elevation of the plasma hemoglobin in the acquired type, while it is normal in the familial variety. This finding has led some observers to believe that the hemolytic mechanism may be different and that the hemolysis is intravascular in one and extravascular (largely a function of the reticuloendothelial tissue) in the other. Splenectomy will afford a permanent cure in the familial type, whereas relapses are apt to occur in the acquired form of the disease.

Sickle-cell anemia may be mentioned here as a disease due to a fundamental defect of the erythron which is familial in nature and peculiar to the colored race. The symptoms occur as a result of the thrombotic manifestations and the severe anemia which is frequently aggravated by more or less degrees of a hemolytic component.

Finally, the Mediterranean anemia constitutes another group which is familial and is due to a defect in the hemoglobin metabolism. The more severe forms occurring during early childhood have been designated as "Cooley's anemia" and the milder forms which survive into adulthood as "Cooley's trait." The so-called "target-cell" and "ovulocytic" anemias are believed to be variant members of this group. Until the exact defect can be discovered and corrected, the treatment in this group is palliative.

Disturbances of the White Cells

A striking increase or reduction in the number of white cells generally excites considerable alarm. Since the actual observation of the quality of the cells is usually relegated to the technician (who is usually not sufficiently trained to be reliable in her cytologic report), this source of information as to its probable cause is sadly neglected. The cause of such discrepancies is sometimes quite obvious, but more frequently they present an ominous dilemma. This is particularly true in cases of severe leukopenia. A careful study of the blood smear may provide some clues as to its etiology, and in most cases, further investigation of the bone marrow is necessary for a more accurate evaluation of the condition. Many cases labelled as "agranulocytosis" or "aplastic anemia" and treated vigorously as such with an imposing battery of expensive and painful injections, have been subsequently proven to be cases of aleukemic leukemia.

Although the prognosis as to its cure is admittedly hopeless, still there is hardly any justification for blindly pushing a regimen of therapy, much of which will do the patient no good, and certainly much harm. Judicious use of blood transfusions and antibiotics is indicated in all severe leukopenias, regardless of the underlying disease, but the administration of pentnucleotide, bone marrow preparations and particularly the folic acid derivatives may be actually harmful in cases of leukemia. Although the results may not be regularly successful in the treatment of leukemia, a more definitive therapy with the recently discovered anti-glutamic acid preparations and x-ray may prolong the lives of these patients. One cannot expect too much from even these agents when administered to a patient in a moribund state, as is so frequently the case.

The Hemorrhagic Disorders

The hemorrhagic disorders constitute the least clearly understood group of blood dyscrasias. The various types may be broadly classified according to the disturbance of the mechanisms concerned with the prevention of loss of blood from the circulation into the tissues:

(1) Purpura resulting from a defect of the capillary wall, per se, includes those cases which present no abnormality in the morphologic or chemical elements of the blood. Among these may be considered a variety of mechanisms which increase capillary permeability to plasma or blood, such as the neurogenic or allergic factor in angioneurotic edema or urticaria, the toxins in streptococcal and other infections, and less defined syndromes as Schoenlein-Henoch's (anaphylactoid) purpura, and purpura simplex, which is a hereditary condition involving the adult female. The bleeding of scurvy is also included in this group, though it differs from the others in giving a positive tourniquet test.

(2) Abnormal bleeding resulting from a reduction in the blood platelets may be either idiopathic or secondary to some cause. The most important diagnostic features are the absence of clot retraction and the presence of characteristic findings in the bone marrow. Splenectomy will usually cure the idiopathic variety, while the benefit is only transient and less pronounced in the secondary type.

(3) Another group of bleeders have some fault with the chemical or enzymatic substances within the circulation which are concerned with blood coagulation. The hemophiliacs have a hereditary deficiency of the antihemophilic globulin fraction. In other instances, bleeding may occur as a result of reduction in the blood prothrombin or fibrinogen, which may be either congenital or acquired.

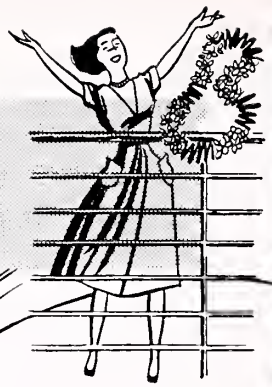
(4) The fourth group includes the relatively rare, so-called "pseudohemophiliac" which cannot be classified in any of the above. This condition is often familial with increased bleeding time, normal platelets and coagulation time, and usually a normal tourniquet test. The fault is believed to lie in the disturbance of retractability of the capillaries following trauma, resulting in continued oozing. Splenectomy in these patients has resulted in death from post-operative hemorrhage.

Conclusion

The above presentation is admittedly very superficial, broad and incomplete. In actual practice, the attending physician's delimma is further aggravated by the occurrence of multiple manifestations of the various disorders in the same patient. However, a good understanding of the physiologic and pathologic concepts of the various disorders should be of great aid in differentiating and diagnosing most of the blood dyscrasias seen in medical practice.

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[EDITORIALS]

ACUTE PANCREATITIS

Many of our ideas about acute pancreatitis have had to be revised.

Hemorrhagic pancreatitis was the only known type until the German surgeon Zoeppfel in 1922 called attention to another: interstitial or edematous pancreatitis. Elman really put this type on the map with his (now classic) article in 1933. More recently we have come to recognize that not just a few but a majority of cases (4 out of 5) of pancreatitis are actually of this mild, innocent type.

Under the heading "Etiology" no longer is the word "unknown" a fair statement. The "common-channel" theory of Opie has been amply verified. Other mechanisms for the production of pancreatitis have been uncovered, such as obstruction of the pancreatic duct by squamous metaplasia of the columnar epithelium (Rich and Duff, 1936), and by inspissated pancreatic secretions (Clark, 1942). Alcohol is now definitely known to be a precipitating factor in a large proportion of attacks of acute pancreatitis. Weiner and Tennant (1938) found pancreatitis 50 times as often in alcoholics as in non-alcoholics, and Hill and Batten[1] found alcohol a factor in 10 out of 11 patients who were asked about it.

Striking changes have occurred in the management of acute pancreatitis. Prior to 1900 nothing constructive was done: diagnosis and disposition were handled by the pathologist.

From 1900 to 1930 diagnosis and (attempted) treatment were in the hands of the surgeon. Surgery resulted in such a high mortality that the pendulum swung violently to non-operative treatment, an attitude epitomized by Pratt's article in *Oxford Medicine* in 1939.

Present-day combined medical and surgical management is based on the crucial and often difficult distinction between edematous and hemorrhagic pancreatitis. Patients with edematous pancreatitis should not be operated on, because they usually recover spontaneously, but patients with hemorrhagic pancreatitis *may* need an operation. Serum amylase may be sky-high with either type of pancreatitis and is hence of no value in distinguishing between them. Hill and Batten have outlined clearly the clinical criteria for distinguishing between the two forms of pancreatitis, and have set forth present day indications for surgical intervention.

Surgical treatment itself has been revised. Since the pancreas is covered with only a thin layer of peritoneum and has no true capsule, multiple incisions in the "capsule" to release "pressure" are no longer advocated. Drainage of the lesser peritoneal cavity, and simple cholecystostomy, are the only two procedures of any proved value.

To our knowledge Hill and Batten are the first to emphasize adequately a point of outstanding importance: that a surprising number (44 per cent in their series) of patients with interstitial pancreatitis will eventually prove to have biliary tract complications which require surgery.

It appears that in the treatment of acute pancreatitis, surgery is coming out of exile and is finding its proper place.

C. A. DOMZALSKI, JR., M.D.

[1] Hill, R. L., and Batten, G. H.: Acute Pancreatitis, HAWAII MED. J. 9:382 (July-Aug.) 1950.

TWO MILES OF AIR

The most effective protective insulation against the atom bomb or the hydrogen bomb, according to one of the authorities, is just plain air —a layer two miles thick! The advice on protecting oneself against the explosions boils down more concisely to the three-word admonition, "Be somewhere else."

But it appears that there is far more to be feared from the inconceivably violent blast and the extremely high temperatures, than from the radiation effects; few victims of the latter are found in areas so remote, or situations so protected, that they survive the former. Radioactivity of the blasted area, too, is not likely to be a serious problem except when the bomb is detonated in fairly deep water, so that large amounts of radioactive water fall on the land and contaminate it.

"The Bomb," then, is not so different from previous weapons that we need feel helpless against it. One difference is that it is likely to injure a larger number of people. And an eighth or a tenth of the casualties will have their injuries complicated by radiation effects—gamma-radiation burns, agranulocytosis, thrombocytopenic purpura, aplastic anemia, and so on. There is danger of diverting too many persons and too much materiel into useless efforts to save some of the latter, and the hopelessly over-irradiated victims must be screened out to conserve first-aid measures for those that can be saved.

It is a complex task, with some new problems; but it is by no means insurmountable. We are equal to it. Let us pray that it never comes; but if it does, let us be so well prepared, so well organized, that it may be said again of Hawaii's doctors, as Surgeon General Norman Kirk said of their performance on December 7, 1941, that "they were ready for it."

H.L.A.

COMPULSORY MEDICAL CARE AND THE WELFARE STATE

Melchior Palyi, internationally known educator and economist, concisely criticizes the arguments advanced for socialized medicine in a book by the above title, which is digested in publication M-32 of the Bureau of Medical Economic Research. The digest can be found in the April 29 issue of the *J.A.M.A.*

If you are impressed and convinced by the argument that socialized medicine is un-American, this publication is not for you. Don't bother with it.

If you have your doubts about this argument, however, and especially if you think there is some merit in government-financed medical care, *don't miss this digest!* The socialists and communists have a lot of potent spellbinders on their team; here is a man of eloquence, learning, and perception who thinks they're wrong and knows how to say so.

Dr. Palyi points out dispassionately and clearly that compulsory medical care inevitably includes many who don't need or want it, and excludes many who do; that it is exorbitantly expensive at best, and prohibitively so at worst; that it is not an inevitable accompaniment of industrialization, as it has been claimed to be; that it undermines the quality of medical care in a host of ways; that it increases the amount of disabling illness wherever it exists; that it is a powerful entering wedge for the development of the totalitarian state; and that it is totally different from every other sort of social security because its benefits are rendered, not in cash but in kind—in services and materials.

"Consequently," he says, "subjective judgment enters into the administrative picture at almost every step, opening the door to arbitrary decisions and to bureaucratic red tape and encroachment, to say nothing of conscious and greedy manipulations."

H.L.A.

"LOOK" LOOKS AT ANTI-VIVISECTIONISTS

The vicious anti-vivisection racket is exposed most capably, with illustrations, in the June 6 issue of *Look,* which went to nearly 18 and a half million readers on May 23.

The medical profession has cause to be grateful to *Look* for its repeated worth-while contributions to their public relations campaign, not in coin but in kind. This article, written for them by potent anti-antivivisectionist William Manchester of the Baltimore *Sun,* is a highlight in the long series of articles, all of which—except for an early one on socialized medicine — have been virtually irreproachable from the standpoint of the doctors.

Anita Loos once coined the deathless remark that "a kiss on the hand makes you feel very good, but a diamond bracelet lasts forever." So too, an editorial back-pat probably makes *Look's* editors happy for a few minutes, but a few subscriptions for your waiting rooms would create an even warmer and more durable glow. Let's show our appreciation for these priceless contributions to medical progress by subscribing to *Look!*

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H.L.A.

QUIT PICKING ON THAT INSURANCE COMPANY!

A doctor who sees a private patient once or twice a month, and an insured one twice or three times a week, for the same disease, is abusing the insurance company and in the long run getting not only himself but the entire medical profession into trouble. This is precisely the sort of conduct that is all too likely to become common under a program of socialized medicine. And if we drive the voluntary medical care plans out of business by indulging in it now, we are liable to have a chance to see how common it is under a compulsory national medical care program.

Premiums with which voluntary medical care prepayment plans are financed are based on normal amounts of medical attention; they cannot take into account the willingness of an occasional doctor to see patients with unnecessary frequency, or an unnecessary total number of times, merely because those patients happen to carry insurance.

The infallible test of fair dealing in this connection is simply this: would you ask a private patient, who will have to pay your bill himself, to return that many times, or that often? If the answer is "Perhaps not," then you are not treating the insurance company—or, in the long run, your patient, who will suffer a loss in terms of eventually increased premiums—honestly.

THE L.E. PHENOMENON AND THE L.E. CELL

Since Hargraves left a bone marrow specimen in his vest pocket long enough to induce the formation of the first recognized "lupus erythematosus cells," this phenomenon has become firmly established as a valid criterion for systemic (disseminated) lupus erythematosus. Studies by Hargraves and Sundberg at Mayo's, Haserick and Bortz at the Cleveland Clinic, Moffat, Barnes and Weiss at Barnard in St. Louis, and other dermatologic investigators make it clear that the L.E. phenomenon (formation of rosettes of clumped leucocytes around masses of nucleoprotein), and to a less extent the L.E. cell, are diagnostic of systemic (acute, subacute or chronic disseminated) lupus erythematosus.

They are not essential to the diagnosis, however, and as Michelson has emphasized, we must not permit them to be so regarded. Haserick has reported one negative result in an acutely ill patient with a low gamma globulin level, and negative results in chronic cases are not uncommon. The diagnosis is still a clinical one, in which laboratory findings must be evaluated, as always, at the bedside.

Haserick has shown that the phenomenon is induced by the action of a thermolabile substance in the gamma globulin fraction of the patient's plasma, which is antigenically different from the gamma globulin itself. It induces the phenomenon almost equally well in the patient's own marrow, normal human marrow, normal dog marrow, or circulating leucocytes. At the Mayo Clinic it has been found that curettings from the base of a cantharides blister produced in the patient's skin will also show the phenomenon. Weiss and his associates at St. Louis have demonstrated it by the simple expedient of mixing whole blood from the patient with normal whole blood and a little heparin, incubating them for half an hour, centrifuging, and examining smears of the buffy coat.

Of great practical value to the clinician is Haserick's generalization that any patient, supposed to have rheumatoid arthritis, who also presents either epilepsy, albuminuria, leucopenia, or a positive serologic test for syphilis, should be suspected of having systemic lupus erythematosus. To these four, he might well have added at least thrombocytopenia and inflammation of any of the serous membranes.

The L.E. phenomenon is here to stay as a diagnostic aid. May it also increase our knowledge of this mysterious and highly fatal disorder!

UNDECYLENIC ACID IS WORTHLESS IN PSORIASIS

Undecylenic acid by mouth in the treatment of psoriasis is both ineffective and potentially dangerous, in the opinion of some 70-odd dermatologists who have treated over 1,200 cases of psoriasis with it for periods of three months or longer. So says Herbert Rattner, of Chicago, who asked them.[1]

The drug, marketed under the trade names of Declid and Sevinon, was characterized by many of the reporting physicians as "disappointing," "ineffectual," and "worthless." Minor reactions to it were common, and more serious reactions were occasionally described. Eugene Hand, of Saginaw, Michigan, recently reported a severe case of labyrinthitis which he attributed to its use.

Undoubtedly dermatologists will immediately stop contributing to this three-million-dollar-a-year business; it is to be hoped that other practitioners will soon follow suit. The drug has had a more than adequate clinical trial, even considering the sketchy evidence originally presented for its effectiveness; and it has been found altogether wanting.

[1] Rattner, H.: Treatment of Psoriasis with Undecylenic Acid by Mouth. Read before the Section on Dermatology and Syphilology of the American Medical Association, San Francisco, June 30, 1950. To be published.

MEDICAL NEWS

Ascorbic acid in large doses (one gram q.i.d. orally) may have specific antirheumatic activity. In a preliminary report, Massel, et al., (*N. Eng. J. Med.* 242:614 [April 20] 1950) cite the unusually rapid movement they observed in seven children with acute rheumatic fever thus treated. Similar favorable results have been obtained in acute nephritis by The Queen's Hospital resident staff using up to 6 grams of ascorbic acid daily.

* * *

"Eurax" (N-ethyl-o-crotonotoluide), a new synthetic **scabicide** is said to be more effective than sulfur or benzyl benzoate. It is not as messy as sulfur, it does not sting like benzyl benzoate, and it is not contraindicated in the presence of secondary bacterial infection. Patterson treated 120 patients: 106 were cured with one 24 hour application and the remaining 14 patients were cured with a second application. (*Southern M. J.* 43:449 [May] 1950.) "Eurax" is made by the Geigy Co., N.Y.

* * *

ACTH has not been mentioned in this column because everybody is following this development closely. A note of caution is voiced by Beck, et al. (*Canad. M. A. J.* 62:423 [May] 1950): in addition to producing Cushing's syndrome, with its attendant hypertension and diabetes mellitus, another danger is that **ACTH may conceal severe infections.** This is due to the fact that fever, leukocytosis and the sedimentation rate are all brought to low normal levels and kept there while ACTH is being given. They describe two patients with acute peritonitis (due in one patient to a perforated duodenal ulcer) who had no fever or abdominal rigidity. Leukocytosis was absent in one patient. The diagnosis was made on the basis of pain and absence of peristaltic sounds.

* * *

Pregnenolone, the 3-hydroxy analogue of progesterone, has been found to **improve performance and prevent fatigue in workers,** but only in those who are **under pressure.** A daily dose of 50 mg. by mouth seems to have a cumulative effect, and the anti-fatigue action persists for several days after the drug is discontinued. Little benefit was observed in subjects who worked at a leisurely (i.e. Hawaiian) pace. (Henderson, E., *et al., J. Clin. Endocrinology* 10:455 [April] 1950.) This drug would seem to be of more use to the busy doctor himself, than to his "tired from doing nothing" patients.

* * *

Epinephrine (0.5 mg. subcutaneously q. 6 h. for 7 to 65 days), **pregnenolone** (100 to 300 mg. intramuscularly daily for 7 to 51 days), and **testosterone** (100 mg. intramuscularly up to 1800 mg. total dosage) were found to have **no detectable influence on rheumatoid arthritis.** (Guest, C. M., *et al., J.A.M.A.* 143:338 [May 27] 1950.)

* * *

Phenylacetylurea, a new anti-convulsant (**Phenurone,** Abbott) seems to be more effective in controlling **psychomotor seizures** than the standard drugs (Dilantin, Mesantoin and Tridione). It is less effective than the others in grand mal seizures, and of no use in petit mal, tonic and myoclonic seizures. Toxic effects occur with about the same frequency as with the other anti-convulsants. (Little, S. C., and McBryde, R. R., *Am. J. M. Sci.* 219:494 [May] 1950.)

* * *

Two new antibiotics are in the limelight. **Terramycin,** which is already available, has almost exactly the same antibacterial spectrum (including the same viruses) as does aureomycin. Effective blood levels are maintained with doses of 250 mg. by mouth every 6 hours. A significant difference is that Terramycin appears in the urine in much higher (5 to 10 times) concentrations than does aureomycin, which would make it the more effective antibiotic in **urinary tract infections.** (Welch, H., *et al., J. Am. Pharm. Assoc.* 34:185 [April] 1950.)

* * *

The second antibiotic, not yet released, **Neomycin,** is almost as effective as streptomycin in tuberculosis. Moreover, it is effective against tubercle bacilli which have developed streptomycin resistance. The only factor limiting the dosage of Neomycin is a moderate nephrotoxicity. (Karlson, A. G., *et al., Dis. of Chest* 27:493 [May] 1950.)

* * *

Preliminary reports on **Phenylindanedione (Danilone,** Charles E. Frosst and Co., Montreal) are optimistic. This new **anticoagulant,** given orally in 50 mg. yellow tablets, has a prothrombin-time-prolonging effect similar to Dicumarol, but of quicker onset (12 to 24 hours) and shorter duration (48 to 72 hours). It also differs from Dicumarol in that vitamin K is not an effective antidote to phenylindanedione (abbreviated P.I.D. by some authors, which is confusing, since no doctor would think of telling his patient [especially a wahine] to go and get some P.I.D.). No hemorrhagic accidents were encountered by Jaques *et al.* in 20 patients. (*Canad. M. A. J.* 62:465 [May] 1950) or by Blaustein, A. U., *et al.,* in 53 patients (*Circulation* 1:1195 [May] 1950.)

* * *

Roe stoutly maintains that death in methyl alcohol poisoning is due entirely to the acidosis (methanol→ formic acid). Oxidation of methyl alcohol (and hence production of formic acid) can be inhibited by ethyl alcohol, which competes for the intracellular iron-containing enzymes. He therefore recommends intravenous sodium bicarbonate, and oral (or intravenous if necessary) **ethyl alcohol** in the treatment of **methyl alcohol poisoning.** (*Quart. J. of Studies on Alcohol* 11:107 [March] 1950.)

* * *

Gregory (at Wadsworth Veterans Hospital, Los Angeles) claims to have found a **virus** in over 1000 **cancer** specimens by means of the electron microscope, to have failed to see this virus in normal tissue or benign tumors, and to have fulfilled all of Koch's postulates with this virus.

Now he has purified a filtrate from cultures of B. subtilis (the same organism which yields Bacitracin). This new material, **Tracin,** given by injection, has produced regression in patients with **Hodgkin's disease, leukemia, lymphosarcoma, squamous cutaneous cancers,** and **cancers of the cervix and colon.** (*Southern M. J.* 43:397 [May] 1950.)

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RECENT ACQUISITIONS

Cancer

Vincent Memorial Hospital *The cytologic diagnosis of cancer.* c1950. (gift of publisher)

Cardiology and Hematology

Dry, T. J. *A manual of cardiology.* 2nd ed. c1950. (gift of publisher)

Zweifach, B. W., ed. *Factors regulating blood pressure.* Transactions of the 3rd conference, May 1949. (gift of Josiah Macy, Jr., Foundation)

Clinical Medicine

Hoffbauer, F. W., ed. *Conference on liver injury.* Transactions of the 1st-8th conferences. July 1943-April 1949. (gift of Josiah Macy, Jr., Foundation)

Shock, N. W., ed. *Conference on problems of aging.* Transactions of the 10th-11th conferences. Feb. 1948-April 1949. (gift of Josiah Macy, Jr., Foundation)

Youmans, J. B., ed. *Medicine of the year, 1950.* c1950. (gift of HTMA)

Gynecology

Janney, J. C. *Medical gynecology.* 2nd ed. c1950. (gift of publisher)

Neurology and Psychiatry

Bramwell, Byrom *Diseases of the spinal cord.* 3rd ed. 1895. (gift of Dr. Wayson)

Bridge, E. M. *Epilepsy and convulsive disorders in children.* c1949. (gift of publisher)

Cadwalader, W. B. *Diseases of the spinal cord.* c1932. (gift of Dr. Wayson)

Lombroso, Caesar *The female offender.* 1909. (gift of Dr. Van Poole)

Spurling, R. G. *Practical neurological diagnosis.* 4th ed. c1950. (gift of publisher)

Nursing

Grant, R. E. *Health teaching in schools.* c1948. (gift of publisher)

McCullough, Wava, comp. *Illustrated handbook of simple nursing.* c1949. (gift of publisher)

Ophthalmology and Otorhinolaryngology

Adam, C. *Ophthalmoscopic diagnosis.* c1913. (gift of Dr. Van Poole)

Atkinson, D. T. *The ocular fundus in diagnosis and treatment.* c1937. (gift of Dr. Van Poole)

Atkinson, T. G. *Oculo-refractive cyclopedia and dictionary.* 3rd ed. rev. c1944. (gift of Dr. Van Poole)

Axenfeld, Theodor *The bacteriology of the eye.* 1909. (gift of Dr. Van Poole)

Bates, W. H. *The cure of imperfect sight by treatment without glasses.* c1920. (gift of Dr. Van Poole)

Blaskovics, L. von *Eingriffe am auge.* c1938. (gift of Dr. Van Poole)

Bulter, T. H. *An illustrated guide to the slit-lamp.* 1927. (gift of Dr. Van Poole)

Clarke, Ernest *The fundus of the human eye.* 1931. (gift of Dr. Van Poole)

Duke-Elder, W. S. *Recent advances in ophthalmology.* 2nd ed. 1929. (gift of Dr. Van Poole)

Elliott, Robert *A treatise on glaucoma.* 2nd ed. 1922. (gift of Dr. Van Poole)

Gifford, S. R. *A handbook of ocular therapeutics.* 2nd ed. rev. c1937. (gift of Dr. Van Poole)

Goldnamer, W. W. *The anatomy of the human eye and orbit.* c1923. (gift of Dr. Van Poole)

Greff, Richard *Atlas of external diseases of the eye.* c1914. (gift of Dr. Van Poole)

Grimsdale, Harold *A textbook of ophthalmic operations.* 3rd ed. 1937. (gift of Dr. Van Poole)

Hays, Harold *Diseases of the ear, nose and throat.* c1925. (gift of Dr. Van Poole)

Holmes, T. H. *The nose.* c1950. (gift of publisher)

Keeler, J. C. *Modern otology.* c1930. (gift of Dr. Van Poole)

Koby, F. E. *Slit-lamp microscopy of the living eye.* 1925. (gift of Dr. Van Poole)

Lyle, Keith *Practical orthoptics in the treatment of squint.* 1937. (gift of Dr. Van Poole)

Morrison, W. W. *Diseases of the nose, throat and ear.* c1938. (gift of Dr. Van Poole)

Parson, J. H. *Diseases of the eye.* 7th ed. 1934. (gift of Dr. Van Poole)

Prinz, Herman *Diseases of the mouth and their treatment.* c1935. (gift of Dr. Van Poole)

The Red Book of Eye, Ear, Nose and Throat Specialists, 1939. 18th ed. c1949. (gift of Dr. Van Poole)

Ridley, Frederick, ed. *Modern trends in ophthalmology.* 1940. (gift of Dr. Van Poole)

Skillern, R. H. *The catarrhal and suppurative diseases of the accessory sinuses of the nose.* c1916. (gift of Dr. Van Poole)

Watson-Williams, Patrick *Chronic nasal sinusitis.* 2nd ed. 1933. (gift of Dr. Van Poole)

Yearbook of the eye, ear, nose and throat, 1948. c1948. (gift of Dr. Van Poole)

Surgery

Cutler, E. C. *Atlas of surgical operations.* c1939. (gift of Drs. Edgar and Louise Childs)

Dodson, A. I. *Urological surgery.* 2nd ed. c1950. (gift of publisher)

McKay, W. J. S. *Operations upon the uterus, perineum, and round ligaments.* 1939. (gift of Dr. Douglas Bell)

(Continued on Page 409)

BOOK REVIEWS

The Cytologic Diagnosis of Cancer. By The Staff of the Vincent Memorial Laboratory of the Vincent Memorial Hospital. A Gynecologic Service Affiliated with the Massachusetts General Hospital, Boston, Massachusetts. Published under the sponsorship of The American Cancer Society. 229 pp. with 153 figures. Price $6.50. W. B. Saunders Co., Philadelphia & London, 1950.

This book represents six years' experience in establishing the value of the cytologic technique in the diagnosis of cancer. The material is well presented and profusely illustrated with drawings and photomicrographs. All parts of the body to which the cytologic technique is applicable are concerned in this report, and the studies represent approximately 7,700 diagnosed cases of cancers of the female genital system, 450 cases of cancer involving the pulmonary system, 400 cases of urinary cancer, 400 cases of gastric malignancy, and 250 cases where serous fluid examinations revealed cancer cells.

It is demonstrated clearly in this publication that the cytologic technique for the diagnosis of cancer is now on firm scientific ground. The work here presented should convince the most ardent skeptic that the diagnosis of cancer by cytologic methods is not a passing fancy but here to stay.

The highly technical nature of the cytologic method and the need for extensive training before making diagnoses by this technique are well pointed out.

The material presented in this book should be of value to all physicians since it not only deals with the technical points involved in the preparation and interpretation of cytologic tests, but it also points out the values and limitations of the cytologic method. Medical laboratory technicians who are well acquainted with the cytologic technique should also find this book of value.

WALTER B. QUISENBERRY, M.D.

A Manual of Cardiology. By Thomas J. Dry, M.A., M.B., Ch.B., M.S. in Medicine. Second Edition. 355 pp. with 97 figures. Price $5.00. W. B. Saunders Co., Philadelphia & London, 1950.

This brief volume covers the subject of cardiology in an interesting and concise manner. Its clearness is extremely helpful for the beginner or for the man who does not limit his practice to cardiology. The author presents x-rays and electrocardiograms alongside his clinical discussion, a correlation which is commendable. The chapter on congenital lesions is particularly good because of this. Embryology and physiology are briefly presented when necessary to an understanding of the subject, and are fitted into the picture in a very satisfactory manner.

The author presents only one point of view. For the beginner this is a boon, but it would hamper the expert using this book as a source for working up a discussion on a particular subject. This is partially offset by a small, but excellent, bibliography.

This book is highly recommended for interns, residents, and all other physicians whose practices are not limited mainly to cardiology, as a handy reference which will adequately fill their needs.

RAYMOND M. DE HAY, M.D.

Menstruation and Its Disorders. Edited by Earl T. Engle. 350 pp. with 105 illustrations. Price $6.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

This book might equally well be called "The Proceedings of the Conference on Menstruation."

The first part of the book is concerned with histochemical studies of the endometrium and cervix, and of tissue lipase and enzymes in the ovarian tissues of rats. This part of the book is pure research and makes very interesting reading to those of us in clinical practice who like to keep in touch with the most advanced thinking in these fields.

There is a very interesting and authoritative article entitled "Abortive Human Ova and Associated Endometria," by Hertig and Rock, authorities in this field. The histophysiology of the human endometrium and the relation of blood flow to endometrial growth are likewise thoroughly presented. There is discussion of the Smith theory of menstrual toxin. There is a very understandable article on the endometrial pathology of functional bleeding by Tel Linde. A study of the atypical secretory phase by temperature charts is discussed as is also the physiology and pharmacology of the myometrium.

The book is profusely illustrated with pictures, charts, and diagrams and there is an extensive bibliography. The printing is easy to read and the material is well arranged. There is also an interesting discussion of the papers by other members of the conference.

The contents of all the papers are summarized at the end of the book in 14 pages by Dr. John Rock.

A great deal of the material is similar to that already published in gynecological literature over the last several years. The advantage of this book is that it brings a good deal of this material under one cover.

C. C. MCCORRISTON, M.D.

Introduction to Psychiatric Nursing. By Marion E. Kalkman, R.N., B.A. First Edition. 336 pp. Illustrated. Price $3.75. McGraw-Hill Book Co., Inc., New York, 1950.

This textbook as an introduction to psychiatric nursing explains very clearly to the student how she can grow professionally, and apply its up-to-date approach in her daily work within this specialty and in other branches of nursing. Lucile Petry has given a very able description in the words "the liveliness and humanity of this book make it an enjoyable reading experience."

This volume supplies a much needed source of attitudes in the observation, understanding and nursing care in the individual patient. It helps the nurse evaluate her own reactions, personal limitations and potentialities when dealing with the emotionally and mentally ill patient.

The author provides information of methods and approaches used to remedy or alleviate specific behavior states. She does not use long technical descriptive means to aid in classification of mental illness but leaves that for the psychiatrist.

OLIVE BENSON, R.N.

The Nose. By Thomas H. Holmes, M.D.; Helen Goodell, B.S.; Stewart Wolf, M.D., and Harold G. Wolff, M.D. 154 pp. Price $4.50. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

This is a small book. It deals with a limited field of medical science, yet its implications are sufficiently important to influence the thinking of the clinician and the pathologist.

The effects of hostile substances in the environment upon the nasal mucous membrane are studied in strictly controlled experiments and equated with symptoms of vasomotor rhinitis and hayfever, as they develop from interpersonal conflicts.

The authors do not indulge in the customary dialectic of psychiatrists, who find an explanation for all symptoms in a mechanical theory of the mind. Their opinions are well guarded. At no time do they press their views to the limits of thinking, where sense is logically carried through to the absurdities of nonsense.

The psychosomatic concept of medicine is sufficiently supported, when it is shown by direct observation how a patient's feeling of insecurity is reflected in the changing appearance of his nasal mucosa.

The book, with its lucid style, contains no hackneyed references to Oedipus or Electra, even where it treats of the basic motives for human action.

The description of varying observable symptoms in the nose, under alternating effects as brought about, for instance, by the presence of a domineering mother-in-law, are reduced to the principles of experimental observation, which would delight the clinician just as much as the pathologist.

MAURICE GORDON, M.D.

Administration of Schools of Nursing. By Dorothy Rogers Williams, R.N., M.A. 288 pp. Illustrated. The MacMillan Company, New York. 1950.

This book, written by a lecturer in Administration of Schools of Nursing and Nursing Services, covers only the problems of the administration of a school of nursing. It is intended primarily to be of assistance to "nurses already directing schools, to those who are preparing for this field of professional work, to assistant directors of various aspects of the nursing education program, and possibly to educational supervisors of state nurse examining boards in their capacity as advisors to schools of nursing of their states."

The text is well organized and there are excellent references at the end of each chapter. The illustrative material in the book consists mostly of organizational charts and a few rotation plans, the majority of which apparently have been taken from other sources.

The author has covered the field of administration in schools of nursing in a commendable manner. However, her treatment of specific topics is superficial in many instances. For example, her discussion of the very important matter of student selection could hardly be said to be of especial value to anyone in need of help regarding this matter.

Sentence structure in this text is somewhat involved and at times hard to follow. Many of the author's statements will seem obvious to anyone who has had any experience in the administration of a school of nursing. There seem to be a number of inaccuracies in the text such as the statements on page 252 that "the American College of Surgeons reviews hospitals desiring to admit medical students for internship after completion of their medical course" and "The Council on Medical Education of the American Medical Association concerns itself with the facilities of the hospital for clinical practice and for medical education experience on the undergraduate level." On pages 80 and 81 it is stated that the Committee on Admissions makes final decision regarding applications to the school of nursing; on page 97 the final responsibility regarding applications is assigned to the director of the school.

The use of the terms "course" and "program" are confused, at least according to the way these terms are understood by the reviewer of this text.

Some of the standards suggested are not optimum as of 1950. Perhaps this is due to the fact that the writing of this book has been underway for a period of five years and many of the references quoted are not too recent.

The chief merit of this book seems to be in the author's stress on the importance of the democratic functioning of a faculty. Even though it may not be too specifically helpful to directors of schools of nursing, it should do much to stimulate them to strive to become leaders rather than disciplinarians. It will open to them a wide vista for further investigation. With lecture augmentation and extensive reference reading, this text can be of some value to students in advanced nursing education programs.

SISTER MARY ALBERT, R.N., M.S.

Medical Gynecology. By James C. Janney, M.D., F.A.C.S. 2nd Edition. 454 pp. with 108 figures. Price $6.50. W. B. Saunders Co., Philadelphia and London, 1950.

The scope of this book is office gynecology. It is based on the author's experience of twenty-five years as a lecturer to medical students. Thus it is directed primarily to medical students and general practitioners. The entire field of gynecology is covered from history to radiation. Presentation of the material is highly variable and in some instances is rather "wordy" but how else can one convey clinical impressions and experiences?

The consideration of the psychosomatic problems related to gynecology is especially valuable and anyone could read it with profit.

Organization and presentation of material is good as are the binding, paper and illustrations.

FRANK C. SPENCER, M.D.

Water and Salt Depletion. By H. L. Marriott, C.B.E., M.D., F.R.C.P. 80 pp. Price $2.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

This book is the poor man's Gamble. Poor in the sense of possessing only average mental stature, like yours truly.

Professor Gamble (Hopkins) published a thin little book in 1942 entitled "Extracellular Fluid." It was a classic—concise, complete and brilliant. It has been a required part of every medical student's library ever since its appearance, and it has the added distinction of being probably the most unread book in said libraries. Unread because it was indigestible, because it packed so very much in a small volume, like Einstein's cryptic epics.

Marriott's little book, by contrast, is pleasantly readable. It contains less laboratory data and covers less ground (or rather, less fluid), but offers much *clinically* valuable information. Reading time: 90 well-spent minutes.

C. A. DOMZALSKI, JR., M.D.

You and Your Heart. By H. M. Marvin, M.D.; T. Duckett Jones, M.D.; Irvine H. Page, M.D.; Irving S. Wright, M.D.; and David D. Rutstein, M.D. Foreword by Paul D. White, M.D. 306 pp. Price $3.00. Random House, New York, 1950.

In appraising a medical book which is written for laymen, there are a number of criteria which probably should be met by such a book if it is to be widely read. There might be differences of opinion what these criteria are, but five should be mentioned. The book (1) should be authoritative and accurate, (2) should hold the reader's interest, (3) should be non-frightening, (4) should be short, and (5) should be illustrated.

"You and Your Heart," a Random House publication, seems to satisfy very well three of these criteria. (1) It certainly is authoritative. The five authors are internationally known for their knowledge about the problems of heart disease. (2) Certainly the book holds the reader's interest. That would be particularly true if the reader happened to suffer from one of the forms of heart disease discussed in the book. (3) It is non-frightening to a very satisfactory degree and much of the space is used to allay false fears which people who fear heart disease might have. (4) The book, however, does seem too long. Even though it is divided, it is doubtful that many persons will read 297 pages of almost continuous print, some of which is repetitive. (5) There are only three illustrations in the book. It is certain that illustrating such a book increases the cost of its production. Nevertheless there would seem to be dividends in its vastly increasing the interest of the reader. A picture of William Harvey, for instance; further diagrams of the normal circulation; or some of the well illustrated statistics on rheumatic fever as published in Harold Yaehres' pamphlet "Rheumatic Fever: Childhood's Greatest Enemy," would be useful here.

The reviewer does not pose as an authority on the criteria for such a book, but it would seem the failings in (4) and (5) make the book of less use than it would otherwise be. Nevertheless it is an excellent treatise for the layman who wants to find out authoritative answers to his questions about heart disease.

A. S. Hartwell, M.D.

Training for Childbirth. By Herbert Thoms, M.D. 113 pp. Price $3.00. McGraw-Hill Book Company, Inc., New York, Toronto, London, 1950.

This book of 113 pages outlines the program of natural childbirth with rooming-in as practiced by the Grace-New Haven Hospital. Every physician doing obstetrics should have a copy of this book and he should read it. Previously he should have read G. Dick Read's "Childbirth Without Fear." Whether the obstetrician practices the outlined procedures or not there are so many articles in the lay literature dealing with these methods, and usually referring to these two books, he needs to be acquainted with them.

The physician and his patient will be rewarded if the time required is given to following the program as outlined.

The author has accomplished two things in this presentation: (1) He has described natural childbirth in simple terms, making this book a good text for parents. (2) He has shown how the principles of natural childbirth can be taught and practiced with groups of clinic and private patients, thus making the program more attractive to those who have felt it would be too time-consuming.

H. McLeod Patterson, M.D.

The Sociology of the Patient. By Earl Loman Koos, Ph.D. First Edition. 264 pp. Illustrated. Price $3.00. McGraw-Hill Book Co., Inc., New York, 1950.

This textbook for nurses presents the student with a valuable interpretation of the patient's sociological background, attitudes, and personality patterns which influence the individual's reaction to his illness. The problems of social interaction and regional integration of health and medical services are also discussed in relation to the individual and his family.

The function of the nurse as part of this social and personal interaction during illness is also stressed. Supplementary projects are outlined to aid in the course of study. A sociological case history is reviewed, and this outline supplementing the medical case records will do much to dispell the interpretation "the cardiac in room 01100 who happens to be Mrs. G—."

This volume will be a valuable aid to the nurse in obtaining a wider medical prospective and more understanding of the patient's "interim period" of illness.

Olive Benson, R.N.

Urological Surgery. By Austin Ingram Dodson, M.D., F.A.C.S. Second Edition. 855 pp. with 645 illustrations. Price $13.50. The C. V. Mosby Company, St. Louis, Missouri, 1950.

This book has accomplished "its purpose to present and discuss those surgical problems arising in every day urological practice." It is not a complete treatise on the diseases of the genito-urinary organs but is an aid in clinical work and an excellent surgical supplement to the excellent books on principles and practice of urology now in use.

It has the advantage of having the various subjects presented by men experienced in the particular subjects about which they write. The surgery, precautions and pitfalls relating to the various operative procedures are discussed clearly. The steps and technics of the operations are given detailed discussions.

A bibliography is appended to each chapter to indicate the source of material and to permit more detailed study of the subject under discussion.

This volume is welcome and is highly recommended.

Edmund Ing, M.D.

If You Have to Count Your Calories. Bureau of Nutrition, Department of Health, Territory of Hawaii, Marjorie Abel, Chief. Price, free.

This concise 7-page booklet, giving the number of calories in an average serving of all the common foods and many foods peculiar to Hawaii and the Orient, is highly recommended for its completeness and simplicity, for distribution to patients who wish to reduce their weight or add to it. Surprises: grated coconut meat runs nearly 600 calories to the cup; *bagoong* and *iriko* each contain only 8 calories to the tablespoonful; and a small dried squid contains 61 calories, which suggests that the observation was made on some one particular small dried squid. Seaweeds are apparently even less fattening than lettuce—they are listed as containing "no calories."

This booklet is furnished free by the Board of Health, in quantities if desired.

Harry L. Arnold, Jr., M.D.

ALSO RECEIVED

Surgical Clinics of North America, New York Number—Surgical Emergencies. Pp. 313-619. Price $18.00 per clinic year, cloth binding; $15.00 per clinic year, paper binding. W. B. Saunders Co., Philadelphia & London, 1950.

Medical Clinics of North America, New York Number—Cardiovascular Diseases. Pp. 609-937. $18.00 per clinic year, cloth binding; $15.00 per clinic year, paper binding. W. B. Saunders Company, Philadelphia and London, 1950.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 295th regular meeting of the Hawaii County Medical Society was held on April 20, 1950, in the staff room of the Hilo Memorial Hospital. Our president, Dr. Leo Bernstein, called the meeting to order at 7:50 p.m.

Dr. Mizuire presented a very well selected group of his cases of kidney pathology covering congenital defects, infections, calculi, trauma and malignancy. His discussions with appropriate pyelography were very well received.

Dr. Henry Yuen has been appointed by the president as the alternate delegate to the House of Delegates meeting at the coming Hawaii Territorial Medical Association convention, in place of regular delegate Dr. T. D. Woo.

Dr. Mizuire approached the members of the society for $135.00 to revitalize the staff room. After a short discussion including possibility of obtaining more photographs of medical society interest for the staff room, Dr. Orenstein moved that Dr. Mizuire be authorized to spend up to $150.00 of the society's funds to beautify the staff room. It was seconded by Dr. M. H. Chang and the motion carried unanimously.

Dr. George Tomoguchi announced the names of the commiteemen for the coming Hawaii Territorial Medical Association convention as follows: Dr. H. Yuen—entertainment, Dr. Jenkin—transportation, Dr. Mizuire—exhibits, Dr. Orenstein—reception, Dr. Miyamoto—mechanical details, Dr. Loo—golf, and Dr. Tomoguchi—general chairman and hotel reservations (in place of Dr. Phillips during his absence). He also mentioned that Mrs. Crawford will handle the women's golf tournament. Then several committeemen were called upon to report on their activities.

Dr. Henry Yuen spoke in behalf of the Hilo Auxiliary and stated that a goodly sum of money will be necessary for entertainment of the visiting auxiliary members. Dr. Orenstein moved, seconded by Dr. Crawford, and unanimously carried that the Hilo Auxiliary be authorized to use up to $300.00 of the Hawaii County Medical Society's money for entertainment of the auxiliary members present at the convention.

Dr. Bernstein read a letter from Dr. John G. Lynn pertaining to the matter of waiving the one year residence requirement if a psychiatrist is obtained for the Big Island. Dr. Crawford moved that the Society ask the Board of Medical Examiners to recommend the Governor waive the one year residence requirement to obtain a psychiatrist. Dr. Yuen seconded it. The motion carried.

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The 296th regular meeting of the Hawaii County Medical Society was held on May 25, 1950 in the staff room of the Hilo Memorial Hospital. **Dr. Leo Bernstein** called the meeting to order at 7:50 p.m.

Dr. Rudolph Wipperman explained the nuclear physics aspects of an atomic explosion. Then **Dr. John Jenkin** continued with the medical aspects. The magnitude and destructive properties of such an explosion and the casualties which can be caused by the blast, burns and radiation were presented to us. Some of the Do's and Don'ts in case of an atomic explosion were also explained.

The minutes of the previous meeting were read and approved. A card of thanks was received from **Dr. and Mrs. Walter Loo** for the flowers which they received from the society upon the arrival of their new baby. Letters of thanks from **Dr. James F. Fleming** of Maui and **Dr. Rogers Lee Hill** of Honolulu were read. A letter of appreciation from the Hilo Blood Donors Cooperative, for the refrigerator that the society had donated, was read. A letter from the Executive Secretary of the Hawaii Territorial Medical Association expressing the success, financially as well as in every other respect, of the annual convention, was also read.

Dr. Yuen presented the recent medical convention's House of Delegates report to the society. A copy of its minutes is filed with the secretary.

The president brought up the question of whether it is necessary to raise our dues by $5.00 to meet the raise from $20.00 to $25.00 which the House of Delegates had proposed and approved, or to have our present dues absorb this raise. Action was deferred until the financial status of the society is determined.

Dr. Yuen brought up, in behalf of the auxiliary, the matter of sending flowers from Hawaii to the June AMA convention in San Francisco. This is really a problem for the auxiliary but since they cannot finance it and since all money of the society as well as the auxiliary, comes from the doctors' pockets in the final analysis, it was brought up here.

ACTION: Dr. Mizuire moved to appropriate $250.00 ($200.00 plus the $50.00 which the auxiliary did not spend during the convention) for flowers to be sent to the AMA convention. The motion was seconded by Dr. Bergin and passed.

The Disaster Council was elected by ballots. Those elected were **Drs. Orenstein, Crawford** and **Wipperman** from Hilo, and **Drs. Carter** and **Seymour** from the rural districts.

Being in the midst of the funds drive of the Cancer Society, **Dr. Mizuire,** one of our representatives to the local Cancer Society, approached the Medical Society for a donation. Much discussion followed on the matter of setting a precedent. Some members expressed the opinion that doctors contribute individually so there was no necessity for this society to contribute.

ACTION: Dr. Crawford moved that the Hawaii County Medical Society donate $25.00 to the local Cancer Society. The motion was seconded by Dr. Leslie and carried.

Dr. Mizuire wanted to have cleared whom a doctor should call when he has a tuberculosis patient—the Board of Health or the Puumaile Hospital directly. **Dr. Leslie** stated that the doctor should contact the hospital directly for expediency if the patient needs hospitalization. He emphasized that this applies to all types of tuberculosis and also to allied pulmonary diseases.

PETE T. OKUMOTO, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

A special meeting of the Society was held on May 22. **Dr. Samuel Yee** presided; about 68 members and guests were present.

Dr. Daniel Blain, Medical Director of the American Psychiatric Association, spoke on "Psychological Bases of Psychosomatic Medicine."

G. M. McDonnel, Major, MC, with the Armed Forces Special Weapons Project of the Atomic Energy Commission, spoke on the "Effects of the A-Bomb on People." He explained that the control of fear and the psychological effect that the bomb may produce are two of the most important aspects.

Slides were shown by both speakers.

* * *

The June meeting of the Honolulu County Medical Society was held Friday, June 2, 1950 at 7:30 p.m. in the Mabel Smyth Building. Dr. Yee presided; 65 members and guests were present.

It was reported that a check in the amount of $125 had been received from the U. S. Treasury for 6 months' interest on the $16,000 we invested in Series G Bonds.

Dr. Batten presented the following memorial resolution of Dr. Van Poole which was unanimously passed:

BE IT RESOLVED, that we members of the Honolulu County Medical Society record the sorrow and sense of loss we have sustained in the passing of our brother physician, Dr. Gideon McDonald Van Poole, whose fifty years of active practice of medicine terminated April 13, 1950, after an illness of more than a year.

Dr. Van Poole, who came to Honolulu after his retirement from the United States Army with a rank of Colonel, practiced for the next thirty years in his specialty of eye, ear, nose and throat.

The fact that he was esteemed and honored by all of us in the Medical Society is shown by virtue of his having been President of the Honolulu County Medical Society in 1925 and of the Territorial Medical Association in 1934-35, in addition to membership in innumerable scientific and professional societies.

BE IT FURTHER RESOLVED, that we extend to the bereaved members of his family and his many personal friends our deepest sympathy and condolences; and

BE IT FURTHER RESOLVED, that a copy of this resolution be forwarded to the wife of Dr. "John Henry" Van Poole.

The Chairman made the following announcement on behalf of the Program Committee headed by Dr. Burgess:

1. The Committee is contemplating a dinner meeting —that is, a buffet dinner followed by a scientific meeting—and the committee is asking the members for any and all suggestions. If there is no objection, they propose to go ahead with the plan.
2. Meetings henceforth will start on time and papers will be short and snappy.
3. As the monthly meeting falls on the first Friday of each month, doctors are asked to notify their wives to this effect.

Dr. White, chairman of the Medical Advisory Board of the Convalescent Nursing Home, called the attention of the members to the fact that the Home is open to all the doctors. He reported on the present status of the institution and informed the members regarding admissions. Envelopes containing information relative to the Home were placed at the back of the Auditorium and doctors were asked to take one with them.

Dr. Tilden introduced Dr. Clifford Moran who is at present doing pathology at St. Francis Hospital.

The members were urged by Dr. Fronk to participate in politics at the precinct level.

Cancer of the Breast with Special Emphasis on the Problem in Hawaii, illustrated by slides and colored movie—Dr. Walter B. Quisenberry.

Treatment with ACTH with Special Reference to Bronchial Asthma—Dr. Frederick L. Giles.

At the close of the meeting, refreshments were served in the lanai.

WILLIAM WALSH, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular meeting of the Kauai County Medical Society was held at 7:30 p.m. on Wednesday, April 12, 1950, at the Wilcox Memorial Hospital Library.

A preliminary talk on the role of the speech therapist in the treatment of speech defects and disorders was given by Mr. Fox. His talk highlighted the necessary follow-up and cooperation on the part of the physicians and therapists in the treatment of these conditions which are so often neglected in the average case.

The application for membership of **Dr. Dorothy Kemp** was reviewed and unanimously voted on for acceptance.

It was voted that the Society be on record as backing the Hawaii Cancer Society.

Plans for using a booth at the Kauai County Fair for the purpose of a K.C.M.S. display were discussed. These plans were tabled pending the lack of time necessary to organize a suitable display. It was felt that next year the society would plan to have a booth at the fair.

A motion was made by **Dr. Fujii** that since **Dr. Boyden,** the appointed delegate to the H.T.M.S. meeting in Hilo, would not be able to make the trip and in the absence of his alternate, **Dr. Kuhns,** that **Dr. Kemp** be appointed delegate. This motion was seconded by **Dr. Cockett** and approved by the society.

The bank balance of the treasury of the society was noted to be $403.96 as of March 30, 1950.

* * *

The May meeting of the Kauai County Medical Society was called to order by Dr. Fujii at 7:30 p.m. on Wednesday, May 10, 1950 at the Wilcox Memorial Hospital Library.

The minutes of the previous meeting were read and approved. Correspondence read included a letter pertaining to Dr. White's forthcoming visit to Kauai, the members being notified of the time of his lecture. Dr. Dorothy Kemp made a brief report on the salient features of the Hawaii Territorial Medical Association meeting at Hilo.

The meeting was then adjourned at 8 P.M. in preparation for Dr. Blalock's lecture.

K. F. KUHLMAN, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The meeting of April 18 was opened by the new President, **Dr. Robert Cole.** Guest: **Dr. Robert B. Faus,** HMSA Medical Director.

A letter from the Territorial Medical Association dated April 3, 1950, was read requesting Maui doctors to attend and participate in sessions of the Territorial Conference of Social Welfare to be held on Maui, April 19-22. It also suggested that the Auxiliary members be present to distribute literature opposing Compulsory Health Insurance. No action.

A letter from Mr. Schaefer, Jr., President of the Maui Chamber of Commerce, was read requesting our opinion concerning the problem of County Health Officer for Maui County.

ACTION: It was moved by **Dr. McArthur,** seconded by **Dr. Toney,** that the Society go on record as approving the problem of Maui County Health Officer. The secretary was instructed to write to the Chamber assuring them of our support on that matter. Passed unanimously.

Dr. Robert Faus talked to the members on the history of HMSA with its experiences on Maui and other islands and its present financial structure. He requested the cooperation and the kokua of the members by participating fully with the HMSA program.

* * *

A special scientific breakfast meeting of the Maui County Medical Society was held at the Puunene Athletic Club at 8:30 a.m. on May 14, 1950 with Dr. Cole presiding.

Guests were Dr. Paul D. White of Harvard and Dr. Warren White of Shriners' Hospital, Honolulu.

The meeting was turned over completely to Dr. Paul White who spoke on the history of the progressive importance and incidence of cardiovascular diseases in the last 20 years. He discussed the highlights of the various types of heart disease in the following order: congenital heart disease, rheumatic heart disease, syphilitic heart disease, subacute bacterial endocarditis, hypertensive heart disease, coronary heart disease and congestive heart disease.

His most interesting talk was followed by presentation and discussion of two cases by Society members with Dr. White acting as consultant.

1. A case of a Portuguese girl, aged 13 years, with a congenital heart murmur who otherwise was perfectly well—presented by Dr. Fleming.

Diagnosis: Patent ductus arteriosus, amenable to surgery.

2. A case of a Japanese girl, aged 21 years labeled a Blue Baby at birth—presented by Dr. Izumi.

Diagnosis: Tetralogy of Fallot.

Treatment: Blalock operation.

Meeting adjourned at 11:50 A.M.

EDWARD T. SHIMOKAWA, M.D.
Secretary

MEDICAL ASPECTS OF ATOMIC WARFARE

(Continued from Page 381)

"Report on the Medical Studies of the Effects of the Atomic Bomb" (Appendix 9 of the General Report, Atomic Bomb Casualty Commission, Jan., 1947), Dr. Masao Tsuzuki	National Research Council, 2101 Constitution Ave. Washington 25, D.C.
"New England Journal of Medicine" Vol. 240, No. 22, June 2, 1949 Vol. 241, No. 17, October 27, 1949	New England Journal of Medicine, 8 Fenway Boston 15, Mass.
"Medical Aspects of Nuclear Energy" National Military Establishment	NOT AVAILABLE FOR PUBLICATION

FILMS:

"Atomic Energy" (British, 4 reels)	Civil Defense Dept. National Security Resources Board Washington 25, D.C.
"Primer on Monitoring"	
"Medical Effects of the Atomic Bomb," Parts I, II, III	
Part I: Physics-Physical Destruction, Casualty Effects, No. PMF 5058	
Part II: Pathology and the Clinical Problem, No. PMF 5148	
Part III: Medical Services in Atomic Disaster, No. PMF 5149	

D E R M A T O L O G Y

Patient-"Doctor, can you give me a prescription for my hair?"
Doctor -"Don't worry, old man, it'll come out all right!"

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NOTES AND NEWS

PERSONALS

Dr. K. Yoshimura, who has been practicing in Kealakekua, Kona, Hawaii, for the last nine years, has recently opened his offices in Honolulu for the general practice of medicine and surgery. Dr. Yoshimura was graduated in 1939 from the University of Nebraska College of Medicine, in Omaha, Nebraska, and spent his interneship at the St. Agnes Hospital, in Fond du Lac, Wisconsin, and in the New Rochelle Hospital, New York. In 1933 he was a resident at the Kuakini Hospital, Honolulu, following which he practiced at Waimea, Kauai, for a number of years.

Dr. Kenneth E. Ho, a native of Honolulu, has opened his offices for the practice of general medicine and surgery. His preliminary education was at the University of Wisconsin and he received his M.D. from the Middlesex University Medical School, in Boston, Massachusetts, in 1944. Following this he interned at the Bronx Hospital, in New York City and spent two years as an interne and later as a resident at the Kuakini Hospital, Honolulu from 1945 to 1947. In 1948 Dr. Ho went to the Orient, where he practiced in Hong Kong, Shanghai and Canton, China, until his return recently to Honolulu.

Dr. and Mrs. Francis T. Kaneshiro have returned from an extended mainland trip, during which time Dr. Kaneshiro attended the 10th Annual Reunion of his class at the Jefferson Medical College, in Philadelphia. He also visited in Canada and attended the AMA meeting, in San Francisco.

Dr. Robert B. Faus has been honored by Governor Stainback, who has appointed him head of the Territorial Disaster Relief Commission. Dr. Faus has recently returned from a meeting in Chicago of the State and Territorial heads of the disaster relief program of the American Medical Association.

Dr. Steele Stewart attended the annual meeting of the American Orthopedic Association in Virginia Beach, Virginia, where he delivered a paper on "The Care and Cure of Club Feet." Dr. Stewart also visited Baltimore before returning to Honolulu.

Dr. L. Q. Pang, of Honolulu has returned from New York City, where he attended meetings of the American Otorhinologic Society for the Advancement of Plastic and Reconstructive Surgery and the Association for the Rehabilitation of Cleft Palate Patients, in Chicago.

Dr. Kameichi Takenaka has recently completed his residency at the Kauikeolani Children's Hospital, Honolulu, and has gone to Chicago, where he will continue his training as a resident in pediatrics at the Mercy Hospital and Loyola University Clinic.

Dr. Verne C. Waite, of The Clinic, has returned from an extended graduate training program at the University of Minnesota, where he took special work in general and proctologic surgery.

Dr. Robert Johnston of the Medical Group, has successfully completed the examinations of the American Board of Surgery and has been certified by the Board.

Dr. Rodney West, of The Clinic, has returned from a mainland trip, during which he attended the Kiwanis Convention in Miami, Florida, the International Conference on Obstetrics, in New York City, and the Aero-Medical Convention, in Chicago, in June.

Dr. and Mrs. L. A. R. Gaspar, of Honolulu, vacationed briefly on the mainland, where Dr. Gaspar continued his convalescence from a recent illness. He resumed his practice in June.

Dr. Clarence W. Trexler, of Honolulu, attended the meeting of the Pacific Coast Oto-Ophthalmological Society, which was held in San Francisco, in June.

A wedding of considerable interest to the local medical profession was that of **Dr. Howard E. Milliken,** a resident in obstetrics at The Queen's Hospital, Honolulu, to Miss Patricia Frances Blatt, surgical nurse at The Queen's Hospital. **Dr. Duane D. Warden,** also a resident in obstetrics at The Queen's Hospital, served as the best man.

Dr. Richard D. Kepner has returned from a six weeks plane trip to the mainland, where he attended the meetings of the American Academy of Neurology in Cincinnati, the American College of Physicians in Boston, and the American Psychiatric Association in Detroit. He presented a paper entitled "Periodic Paralysis Associated with Hyper-Thyroidism: A Case Report," at the Cincinnati meeting.

Dr. Marion Hanlon, who completed his residency at the Kauikeolani Children's Hospital, Honolulu, is now located at the Kohala Plantation Hospital, on the Big Island. Dr. Hanlon is a graduate of Northwestern Medical School, in 1947 and he interned at The Queen's Hospital.

The following physicians attended the Annual Meeting of the American Medical Association in San Francisco: **Dr. A. S. Hartwell,** delegate; **Dr. Archie Orenstein,** alternate delegate; **Dr. Harry L. Arnold, Jr., Dr. John Bell, Dr. Morton Berk, Dr. and Mrs. Alfred J. Burden, Dr. and Mrs. Mun Hook Chang, Dr. John W. Cooper, Dr. H. S. Dickson, Dr. and Mrs. William Ito, Dr. W. J. Holmes, Dr. and Mrs. Homer Izumi, Dr. Brooke Jamieson, Dr. and Mrs. Harold Johnson, Dr. and Mrs. Francis T. Kaneshiro, Dr. C. K. Kobayashi, Dr. and Mrs. Fred Lam, Dr. Cyrus Loo, Dr. and Mrs. Joseph T. Lucas, Dr. Doss Lynn, Dr. Thomas M. Mar, Dr. and Mrs. Guy Milnor, Dr. H. Q. Pang, Dr. Robert Perlstein, Dr. John Peyton, Dr. Lyle Phillips, Dr. F. J. Pinkerton, Dr. A. S. Price, Dr. Herbert T. Rothwell, Dr. Bernard Schultz, Dr. H. Joseph Simon, Dr. and Mrs. Norman Sloan, Dr. Kameichi Takenaka, Dr. and Mrs. I. L. Tilden, Dr. Burt O. Wade, Dr. Peter Washko, Dr. and Mrs. J. Warren White, Dr. Laurence Wiig, Dr. and Mrs. Robert Wong** and **Dr. T. D. Woo.**

The new Waikiki Medical Building at 305 Royal Hawaiian Avenue in Waikiki was opened in June. The following doctors have offices in the building: **Dr. Philip S. Arthur, Dr. Donald S. Depp, Dr. Richard S. Dodge, Dr. Richard C. Durant, Dr. Walter B. Herter, Dr. William John Holmes, Dr. F. Bernard Schultz, Dr. Frank C. Spencer,** and **Dr. William H. Stevens.** Drs. Arthur, Holmes and Schultz will continue to maintain their offices also in the Young Hotel Building.

Dr. James C. Sargent of Milwaukee, Chairman of the Council on National Emergency Medical Serivce of the American Medical Association, visited Honolulu in June. He was entertained by **Dr. Guy Milnor** and called on **Dr. Robert Faus,** Chairman of our Territorial Emergency Medical Service Committee.

GIDEON McDONALD VAN POOLE, M.D. 1876 — 1950

A career of more than fifty years in the active practice of medicine came to a close on April 13, 1950 with the passing of Dr. Gideon McDonald Van Poole. He had been critically ill for more than a year and continuously confined in Tripler Hospital since last November.

He was born in Salisbury, North Carolina, September 2, 1876. He attended the University of North Carolina and later studied medicine at the University of Maryland where he received his M.D. degree in 1899. The following year he entered the United States Army Medical Corps. After completing his studies at the Army Medical School he was married to Miss Margaret S. Van Dyke in 1905. His army career lasted twenty years, until his retirement because of physical disability in 1920 with the rank of Colonel. He moved to Honolulu after his retirement and spent the next thirty years in the private practice of his specialty, eye, ear, nose, and throat. During this period he took many post-graduate courses in the U. S. and abroad.

He was on the staff of The Queen's Hospital, St. Francis Hospital, Children's Hospital and Kuakini Hospital. He was a member of the Honolulu County Medical Society, of which he was President in 1925, and of the Territorial Medical Association, of which he was President in 1934-35. He was a Fellow of the American Medical Association, a Fellow of the American College of Surgeons, a member of the American Academy of Ophthalmology and Otolaryngology, a member of the American Laryngological and Otolaryngological Society, a member of the American Bronchoscopic Society, a member of the Association for Research in Ophthalmology, and a Fellow of the American Medical Association of Vienna. He was a Scottish Rite, Mason and Shriner.

During the first World War he served in France, which won for him a decoration by the French Government. Unknown to all but a few, the physical disability for which he was retired from the army caused him periods of disability, but in spite of this handicap he always took an active part in civic and professional affairs.

In the passing of "John Henry," as his friends called him, we have lost a kind and thoughtful friend. He was a devoted husband, an honored citizen in the community. Now that he has gone his many friends will long feel the vacant place left, but his deeds and his memory will live on.

GROVER A. BATTEN, M.D.

Hawaii

Convention??

Sure we had ours—the Hawaii Territorial Medical Association convention in Hilo on May 4, 5, 6, and 7. Weren't you here? Fun was had by all!

Bon Voyagers

Dr. and Mrs. Okada of Honokaa left for the mainland on May 12 for a three months' holoholo-postgraduate study trip. Is this some sort of a fad or is it spring fever?

This time it is our medical society president, **Dr. Leo Bernstein.** Dr. and Mrs. Bernstein left Hilo on May 26 for a three months' trip to the mainland. He will attend the Western Branch, Public Health Association meeting in Portland, Oregon. Then he will pay a visit to his home in Massachusetts and also to his daughter who is in school. He is expected back at his office on August 1.

Dr. S. Mizuire left Hilo on June 3 for a two week postgraduate course in surgery at the Cook County Hospital in Chicago. While on the mainland he will attempt a difficult task—finding a pathologist and a radiologist for the Hilo Memorial Hospital. He is expected back on June 18.

Others who are taking mainland trips are **Drs. Archie Orenstein** and **M. H. Chang** of Hilo, and **C. Hayashi** of Kona. Dr. Orenstein attended the AMA Convention in San Francisco as the alternate delegate from Hawaii. He was gone from June 16 to July 1. Dr. and Mrs. M. H. Chang and family left the islands on June 21 for a three months' vacation trip. His office will be handled by **Dr. K. K. Ota.** Dr. C. Hayashi is planning to leave for the mainland on about the 15th of July for a two weeks' postgraduate course in Chicago. During his absence, **Dr. Richard Yamanoha** of Hilo will cover his office.

The Fishes That Didn't Get Away

On May 28, **Dr. S. Mizuire** organized a fishing party composed of nurses of the Hilo Memorial Hospital, Mr. Russell Tucker (Hilo Memorial Hospital Administrator) and wife, **Dr. and Mrs. William Gaenge** of Pepeekeo Hospital, and **Dr. Robert Miyamoto,** and went out for the big ones off the Kona coast. More than two dozen fishes ranging from this big to this big were caught in all. The most popular drug during the trip was dramamine.

Disappointment of Four Doctors

I'm sure you've heard of the June 1, 1950 volcanic eruption on the Big Island by this time. Well, four Hilo doctors heard about it. On June 4, **Dr. and Mrs. M. L. Chang** and family drove off via the Hawaii National Park to view the lava flow. During the meantime, the lava flow changed its course so a road block was placed at Waiohinu, Kau. There Dr. Chang and party were stopped. Soon **Dr. and Mrs. Pete T. Okumoto** and family drove up and were stopped. Then along came a Cadillac full of distinguished people including **Dr. Henry Yuen** and **Dr. Archie Orenstein.** Not even a trumped up emergency at the lava flow got any of the doctors through the road block.

Transfer

Dr. Marion Hanlon, formerly of Honolulu, is now practicing general medicine and surgery in Kohala, Hawaii.

Maui

A daughter, Suzan Sachie, was born to **Dr. and Mrs. Edward T. Shimokawa** of Lahaina, Maui.

WOMAN'S AUXILIARY

The Woman's Auxiliary to the Hawaii Territorial Medical Association held its annual meeting in Hilo at the time of the Medical Association annual meeting. The new officers of the Territorial Auxiliary are:

President: **Mrs. F. J. Halford**
President Elect: **Mrs. R. G. Johnston**
First Vice President: **Mrs. Richard Chun**
Second Vice President: **Mrs. K. Izumi**
Recording Secretary: **Mrs. Joseph Lucas**
Corresponding Secretary: **Mrs. Robert Katsuki**
Treasurer: **Mrs. R. D. Kepner**
Executive Board Members: **Mrs. H. H. Walker**
Mrs. R. D. Millard

The Woman's Auxiliary to the Honolulu County Medical Society has been assisting with the plans and arrangements for the Post AMA Convention in Hawaii. They were hostesses at a Japanese tea for the visiting doctors and their wives held at the Honolulu Academy of Arts on July 7. **Mrs. Robert Millard** was chairman of the committee for the Post Convention. **Mrs. M. Hoshino** and **Mrs. K. Okazaki** planned the entertainment for the tea. Flowers and foliage for the decoration of the AMA banquet in San Francisco in a Hawaiian motif were provided by the ladies of the Honolulu and Hawaii County Auxiliaries under the chairmanship of **Mrs. J. W. Devereux** and **Mrs. H. E. Crawford.**

In March the Woman's Auxiliary to the Honolulu County Medical Society elected the following officers:

President: **Mrs. Fred Lam**
President Elect: **Mrs. Douglas Bell**
Vice President: **Mrs. Thomas Fujiwara**
Recording Secretary: **Mrs. Douglas Murray**
Corresponding Secretary: **Mrs. T. Nishigaya**
Treasurer: **Mrs. Laurence Wiig**
Historian: **Mrs. F. D. Nance**
Members at Large: **Mrs. L. Q. Pang, Mrs. R. Dodge**

The Honolulu Auxiliary met in the Mabel Smyth Lounge on June 6 and listened to a talk on "The Problems of Handicapped Children" by Mrs. Helen Howard of the Sultan Foundation. Thanks to the efforts of **Mrs. Thomas Fujiwara** and her membership committee, there were twenty-six doctors' wives present who had not previously come to the Auxiliary.

NEWS

Dr. Hiscock Conducting Health Survey



DR. HISCOCK

Dr. Ira V. Hiscock, Chairman of the Department of Public Health at Yale University, is conducting a six weeks' survey of public health problems and health agencies in Hawaii. Dr. Hiscock's visit, which was sponsored by the Oahu Health Council, is being financed jointly by the Hawaii Cancer Society, Hawaii Heart Association, Oahu Tuberculosis and Health Association, National Foundation for Infantile Paralysis (Honolulu Chapter), National Society for Crippled Children and Adults (Honolulu Chapter), Public Health Committee of the Honolulu Chamber of Commerce, Territorial Nurses' Association, and Hawaii Territorial Medical Association.

Groundwork for Dr. Hiscock's visit this year has been laid by his two previous official visits and surveys, made in 1929 and 1935, and by activities of an advisory committee composed of representatives of 18 health agencies, which has gathered a great deal of factual material as a basis for the first part of the survey.

Dr. Hiscock has addressed two public meetings while here and will address one more before he leaves.

Microfilm Journals

The HAWAII MEDICAL JOURNAL has entered into an agreement with University Microfilms, Ann Arbor, Mich., to make itself available to libraries on microfilm form.

The microfilm is in the form of positive microfilm, and is furnished on metal reels, suitably labeled. Inquiries concerning purchase should be directed to University Microfilms, 313 N. First Street, Ann Arbor, Michigan.

Award for Outstanding Research in the Field of Infertility

The American Society for the Study of Sterility offers an annual award of $1000 known as the Ortho Award, for outstanding contribution to the subject of infertility and sterility. Competition is open to those in clinical practice as well as individuals whose work is restricted to research in the basic sciences. Essays submitted for the 1951 contest must be received not later than March 1, 1951. The Prize Essay will appear on the program of the 1951 meeting of the Society. For full particulars, address The American Society for the Study of Sterility, 20 Magnolia Terrace, Springfield, Mass.

Research Fellowships— The American College of Physicians

The American College of Physicians announces that a limited number of Fellowships in Medicine will be available from July 1, 1951 - June 30, 1952. These Fellowships are designed to provide an opportunity for research training either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. Assurance must be provided that the applicant will be acceptable in the laboratory or clinic of his choice and that he will be provided with the facilities necessary for the proper pursuit of his work.

The stipend will be from $2,200 to $3,200.

Application forms will be supplied on request to The American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa., and must be submitted in duplicate not later than October 1, 1950. Announcement of awards will be made November, 1950.

Course in Postgraduate Gastroenterology

The National Gastroenterological Association, announces that its course in Post-graduate Gastroenterology will be given at the Hotel Statler in New York City on October 12, 13, 14, 1950.

The course, which will again be under the personal direction of **Dr. Owen H. Wangensteen,** Professor of Surgery, University of Minnesota Medical School, will cover the following subjects: Diseases of the Mouth; Diseases of the Esophagus; Peptic Ulcer Diseases of the Stomach; Diseases of the Pancreas; Cholecystic Disease; Psychosomatic Aspects of Gastrointestinal Disease; Diseases of the Liver; Diseases of the Colon and Rectum and other miscellaneous subjects including Pathology and Physiology, Radiology, Gastroscopy, etc.

For further information and enrollment write to the National Gastroenterological Association, Dept. GSJ, 1819 Broadway, New York 23, N. Y.

The American College of Physicians Annual Session at St. Louis April 9-13, 1951

The American College of Physicians will conduct its 32nd Annual Session at St. Louis, Mo., April 9-13, inclusive, 1951. **Dr. Ralph Kinsella** of St. Louis is the General Chairman and will be responsible for local arrangements and for the program of Clinics and Panel Discussions. **Dr. William S. Middleton,** President of the College, Madison, Wis., will be in charge of the program of Morning Lectures and afternoon General Sessions.

MEDICAL LIBRARY

(Continued from Page 399)

The Library wishes to acknowledge with thanks the contribution of $250 from the Honolulu Chapter of the National Foundation for Infantile Paralysis. This donation will help us to build up our collection on poliomyelitis and in allied fields, and is most gratefully received at this time when our budget has been curtailed.

* * *

Dr. James T. Kuninobu gave us his back files of bound volumes of *Military Surgeon.* We are particularly thankful to receive journals already bound as it saves us binding expense.

* * *

Dr. William J. Holmes turned over to the Medical Library and also to Tripler Hospital Library his back files of journals in the fields of ophthalmology and otorhinolaryngology. Many many thanks.

* * *

Dr. Harry L. Arnold, Jr., published an article on "Diffuse Lepromatous Leprosy of Mexico" in the April issue of *Archives of Dermatology and Syphilology.*

S U R G E R Y

Patient-"Do you think I can get back to playing my violin in two weeks after surgery?"
Doctor -"Can't guarantee the violin, but the harp's a cinch."

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Sixtieth Annual Meeting
Hawaii Territorial Medical Association

AMERICAN LEGION HALL
Hilo, Hawaii, May 4-7, 1950

The sixtieth annual meeting of the Hawaii Territorial Medical Association was held in Hilo, Hawaii, with scientific meetings and exhibits being held in the American Legion Hall. The following program was presented:

SCIENTIFIC PROGRAM

Diagnosis and Treatment of Congenital Heart Disease Accompanied by Cyanosis (Tetralogy of Fallot), by Alfred Blalock, M.D. (by special invitation).

Acute Pancreatitis, by Rogers Lee Hill, M.D. and Grover H. Batten, M.D.

A Study of Thyroid Disease in Hawaii, by Gilbert C. Freeman, M.D.

Non-operative Treatment of Perforated Duodenal Ulcer, by Major Harold F. Bertram, M.C.

Heart Disease in Middle Age, by Paul D. White, M.D. (by special invitation).

The Correlation of Laboratory Data with Renal Disease, by Morton E. Berk, M.D. and A. V. Molyneux, M.D.

Hodgkin's Disease, by S. R. Brown, M.D. Discussion and Case Report by Thomas Fujiwara, M.D.

Retinopathies Associated with Vascular Disease, by Ogden D. Pinkerton, M.D.

Rheumatic Fever in Hawaii, by Teruo Yoshina, M.D. and Angie Connor, M.D.

Medical Planning for Disasters, by Charles L. Wilbar, Jr., M.D.

Hawaii Medical Service Association Report, by Lyle G. Phillips, M.D.

MEETINGS

Advisory Committee to the Bureau of Maternal and Child Health, Thursday morning, American Legion Hall.

Advisory Committe to the Bureau of Crippled Children, Thursday afternoon, American Legion Hall.

Council—Thursday evening dinner, The Lanai.

House of Delegates—Friday afternoon, 2:00, American Legion Hall.

Woman's Auxiliary—House of Delegates—Friday afternoon, Naniloa Hotel.

Woman's Auxiliary—Annual Membership Meeting—Friday evening, Naniloa Hotel.

Round Table Meeting—Saturday morning breakfast, Naniloa Hotel—led by Paul D. White, M.D. and Alfred Blalock, M.D.

House of Delegates—Saturday morning, 9:00, American Legion Hall.

SOCIAL PROGRAM

Dinner Dance—Saturday evening, The Volcano House.

Golf—Sunday morning, Hilo Country Club; W. S. L. Loo, M.D., in charge.

Picnic—Sunday morning, 11:00, Hilo Country Club.

NOTES

Scientific papers presented have been submitted for publication in the HAWAII MEDICAL JOURNAL.

The third annual exhibit of the Hawaii Physicians' Art Association was held in the American Legion Hall during this meeting. First prize was awarded to Dr. Pauline Stitt.

There were scientific exhibits on the following subjects:

Blood Bank
Cancer Cytology Laboratory
Cancer in Children
Cerebral Palsy
Leprosy

The address of the President, minutes of meetings and reports follow:

ADDRESS OF THE PRESIDENT
H. E. Crawford, M.D.



DR. CRAWFORD

The medical profession is a part of society. We here are a part of the society of the United States. The average member of that society enjoys privileges as great and probably greater than those of any other form of society that exists, or has existed. Medical men in their professional activities also have privileges beyond those found in most societies today. We can practice where we please and as we please as long as we do not violate certain fundamental laws.

The use of the term privileges as distinguished from rights is pertinent to our position in society today. There has been a great deal of talk recently about rights the individual is entitled to. However, there is no such thing as a right, it is only the privilege granted by society. Even the right to live is not fundamental, witness the situation in regard to the Jews in Germany. The term privilege implies an obligation upon the part of the individual or group to whom it is granted. It is our duty to examine our relationship to the society that grants us the privileges we enjoy in order that we may preserve or improve them.

Societies change, sometimes slowly, often very rapidly. Our position as medical men in society is constantly changing. It can improve or deteriorate quickly. All of us are aware of the speed with which the outstanding features of medicine in Germany changed in the short space of about twenty years from its being the Mecca of those who wished to learn to the institution of the most inhuman practices our members have ever carried out. During the same period our own professional standing has been transformed from relative mediocrity to a most outstanding position, at least in its scientific phases. We want it to remain so.

Medicine faces society on four main fronts, the scientific, the economic, the ethical, and the political.

We hardly need discuss the scientific front in its relation to our society. This is where our interest lies, and we are doing very well. Our progress in this field appears to be accelerating and as it does, our position will improve. Let us not be smug about it for a great deal of our improvement has been due to scientists outside of the medical field and to money made available from resources other than our own. Above all, we should not be narrow in our views and consider we have discharged our duty when we have done our medical work well, for we are citizens as well as physicians.

Medicine faces society on the economic front, and this is one of the most important today. There is a great deal of discussion of the high cost of medical care, much criticism of this among the laity, and considerable concern about it in the profession. Perhaps it may change our perspective if we stop to think that outside of air and water, which so far are free, medical care is the fourth most important item in the maintenance of life. We must have food, we must have shelter from the elements, we must have government, medical care comes next. It does not cost the individual nearly as much as any of the other three on the average, but that word average should be remembered. The layman in general realizes this although he may not have considered the matter in these terms.

The success of the voluntary care plans, which has been phenomenal, is, I believe, not so much a result of the efforts put forth to establish such programs as the tremendous desire on the part of people to provide some security in this respect. This desire must be satisfied. The solution of this problem is not easy. A great deal has been accomplished but not nearly enough to satisfy the demand. It seems apparent to me that there are certain groups with low incomes, in which the extension of these plans is dependent on one of the two policies. Either physicians and hospitals will have to reduce their fee very considerably or government will have to step in. The problem will undoubtedly be solved eventually, the demand for its solution is so great. I would like to refer to this matter later.

On the ethical side and its relation to society, there are several points that should be discussed. Society is changing and our interpretation of ethical principles will have to change with it. The first sentence of section one of the Principles of Medical Ethics as adopted by the American Medical Association says, "The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration." There can be no quarrel with this statement. However, the first sentence of section two is as follows: "The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian dissentions."

We know that this society of ours now demands a high degree of cooperation and mutual interchange of ideas among its groups. We, in order to render service to humanity, must cooperate. We cannot say we know nothing of political strife, but must realize that political progress is intimately associated with medical progress and service to humanity from a medical standpoint can be advanced collectively often much better than it can be individually. Collective action is political action. Too often we refuse to discuss matters with lay groups, or at least do not welcome such discussion because we are afraid we are getting into politics, or our colleagues will consider we are trying to advertise. There is distinct provision in section five as follows: "A physician who desires to know whether, ethically, he may engage in a project aimed at health education of the public should request the approval of the designated officer or committee of his county medical society." Our medical societies are more and more encouraging their members to take part in community organizations, to meet the layman. There is nothing unethical about this, even though some publicity is bound to accrue to the physician from such activity.

This brings us directly to the political side of medicine in its relation to society.

There is a tremendous amount of energy locked up in the members of our communities which can be released for the benefit of medical progress. Let me cite an example.

On this island, there is being completed this year the finest physical plant for the care of patients with tuberculosis in the territory, one of the finest in the world for a community of this size. On Oahu, I believe, we have one of the best medical teams for the care of this disease that can be found anywhere. Maui and Kauai are developing in a similar fashion. The purpose of these institutions is the eradication of tuberculosis. It seems probable that this will be accomplished in the not too distant future. This represents service of humanity of a high order. How has it been accomplished?

First, there had to be physicians who were interested in the problem. They studied means of interesting the public and helped form a lay organization to spread information and elicit financial help. When it was shown that practical results could be obtained they enjoyed more public support, and with it behind them they were able through political action to obtain those funds which were necessary to carry out their purposes.

There are many other fields related to medicine in which the same process has been carried out or is now being attempted, as a method of solving community problems that cannot be taken care of by individual action. Public health cancer control, poliomyelitis, blood banks, crippling conditions, sight conservation, heart disease, may be mentioned. There will be others as time goes on. In some instances, the social pressure for the development of these organizations has come from the public and in others from the profession. In some cases, there has been professional resistance to such organizations, but once they have been established and their value shown, this has disappeared. Physicians should and largely do welcome opportunities to assist in these programs. Their assistance is of value not only because of their knowledge, but because it gives them an opportunity to carry out their duty as citizens and thus help guide necessary political action.

The greatest social pressure facing medicine today, as I have said before, is a desire for a solution of the problem of distribution of medical care and its costs. This has very serious political aspects, it has economic, ethical, and scientific sides to it. A great many of our members are seriously concerned with it, but there are not enough. If the problem is approached with the attitude that the prime object of the medical profession is to render service to humanity, I have no doubt of the ultimate acceptable result. If it is approached with the attitude that financial gain is primary and service to humanity secondary, the government will take over with compulsory health insurance, and I believe this will eventually happen regardless of which political party happens to be in power, because after all, parties can-

not disregard fundamental desires of the majority of the people. We need much more professional and lay interest in this particular problem because it is vital. We need more leaders in this field, more young men to become interested in it so they can develop into the leaders of the future because it is with us to stay, and it must have proper guidance.

Our own internal political actions deserve some consideration. Our members have had far more education than the ordinary citizen. The very fact that they had the patience and intelligence to obtain that education marks them as individuals who should be given respect. Theoretically, at least, they should make up a group well able to govern themselves in a far more logical manner, than the average collection of people. Above all, by the very nature of our profession they should have a reputation for tolerance. Unfortunately, that is not always so and when it's not, when emotionalism creeps into our government it becomes known publicly and our effectiveness in the larger political field diminishes. Medicine must grow up in this respect. There must always be disagreement between our members, that is healthy, but factionalism and personal prejudice will have to go if we are to continue our progress at a satisfactory rate.

Finally, I would like to leave with you the thought that we must be realistic in our thinking. During the nineteen thirties we saw the rise of the Nazi power in Europe. I can distinctly remember thinking at that time there was nothing to worry about, because surely the intelligence of the average person in Germany, and particularly that of its scholars, scientific, medical and other educated people was such that they would not put up with this insane philosophy very long. We know now that was wishful thinking.

We are living in a democracy. If we are realists we must know that democracy must be made to work or we will face dictatorship, either socialistic or some other form.

MINUTES OF MEETING
COUNCIL

Thursday, May 4, 1950, at 6:30 p.m.
The Lanai, Hilo

Present: Dr. H. E. Crawford, presiding; Drs. I. L. Tilden, R. O. Brown, F. J. Pinkerton, R. L. Hill, R. J. McArthur (Maui), A. Orenstein (Hawaii) and A. S. Hartwell (A.M.A. delegate).

Minutes: The minutes of the Council meeting of January 18 were approved as circulated with one correction: that Dr. Pinkerton refrained from voting on the motion appropriating funds for the expenses of the A.M.A. delegates.

Hawaii Medical Journal: The Council appointed following members of the JOURNAL Editorial Board for the year:

Dr. H. L. Arnold, Jr., *Editor*
Dr. L. G. Phillips, *Editorial Director*
Mrs. Edith C. Bennett, *Managing Editor*
Dr. L. M. Wiig, *Assistant Editor*
Dr. R. L. Hill, *Advisory Board*
Dr. H. H. Walker, *Advisory Board*

They requested Dr. Arnold, Jr. to fill the other four vacancies on the Editorial Board, subject to confirmation at the next Council meeting. The motion was made by Dr. Pinkerton, seconded by Dr. Orenstein and passed unanimously.

The Hawaii Chapter of the American College of Surgeons has requested that all papers presented at their annual meeting be published in the HAWAII MEDICAL JOURNAL and that one issue of the Journal each year be devoted to these papers if possible.

ACTION: On motion of Dr. Brown, seconded by Dr. Hill, the Council unanimously agreed that the papers presented before the American College of Surgeons be submitted to the Editorial Board for publication on the same basis as any other papers.

ACTION: Dr. Pinkerton moved that the Territorial Medical Association pay the expenses of Dr. Arnold, Jr. in attending this annual meeting and that such expenses be charged against the JOURNAL, in token recognition of the valuable services performed by Dr. Arnold as editor of the Journal. Dr. Hill seconded the motion and it passed unanimously.

ACTION: As to future procedure in connection with the editor's annual meeting expense, Dr. Pinkerton moved that the matter be considered at the last Council meeting prior to the annual meeting. The motion was seconded by Dr. McArthur and passed unanimously.

Oahu Health Council: The Oahu Health Council has revised its organization and budget, and invited the Territorial Medical Association to become a member on the new basis. Membership fees range from $10 to over $500 and entitle the member agency to two delegates. It was pointed out that the Honolulu County Medical Society had contributed $500 and that the activities of the Oahu Health Council were largely confined to Oahu.

ACTION: Dr. Pinkerton moved that the Council view with favor membership of the Territorial Medical Association in the Oahu Health Council and refer the matter for decision to the House of Delegates. Dr. Tilden seconded the motion and it passed with Dr. Hill dissenting.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Orenstein, the action just taken was rescinded.

ACTION: Dr. Hill moved that the question of joining or not joining the Oahu Health Council be submitted to the House of Delegates for discussion and recommendation. Motion seconded by Dr. McArthur and passed unanimously.

One Year Residence Law: The matter of the laws relating to the practice of medicine has been referred to the medical advisory group to the Holdover Committee of the Legislature and a small subcommittee was appointed to study this. The Board of Medical Examiners was authorized to send out a questionnaire relating to the one year residence clause and received replies from about 85% of the doctors. There were 81.6% in favor of the law, 16% opposed, and the balance expressed no opinion.

ACTION: Dr. Pinkerton moved to table action on the one year residence law. This was seconded by Dr. McArthur and passed.

Dr. Hill: Dr. Hill presented his resignation as Councillor to take effect May 6 when he becomes President of the Association.

ACTION: On motion of Dr. Orenstein, seconded by Dr. McArthur, Dr. Hill's resignation as Councillor was accepted.

A.M.A. Post Convention Meeting:

ACTION: Dr. Pinkerton moved that the Council confirm the action of the President in inviting mainland doctors attending the A.M.A. to a medical meeting to be held in Honolulu on July 6, 1950. The motion was seconded by Dr. McArthur and passed unanimously.

Life Insurance Examination Fees:
On motion of Dr. Pinkerton, seconded by Dr. Hill, the matter of increase in life insurance examination fees was referred to our A.M.A. delegate with the recommendation that he promote increased life insurance examination fees.

Hawaii Medical Service Association: No action was taken regarding HMSA contracts with individual doctors.

Public Relations Program: On May 1, 1950 there was a balance of $2,102.01 in the Public Service Committee's special fund. The report of the Public Service Committee chairman with its recommendations for the coming year's program was presented to the Council and discussed.

ACTION: Dr. Orenstein moved that the recommendations of the Public Service Committee chairman be referred to the House of Delegates and that the Council promote the formation of adequately functioning Grievance Committees in each County Society to which the public may readily present any grievance with the assurance that it will receive fair consideration. The public should be repeatedly informed through various language media of the existence of such committees so that all people may clearly understand that the Medical Society is interested in fair treatment of patients and of doctors. Motion seconded by Dr. McArthur and passed unanimously.

Finances: The Treasurer's budget for the year was presented for discussion. This budget included an increase in dues from $20 to $25 per member for this year (plus the $2 subscription to the JOURNAL). The increase in dues was recommended to cover the expenses of the delegate, alternate delegate and executive secretary in attending A.M.A. convention. This budget did not include expenses of the Public Service Committee.

The fact that Mrs. Bennett last year had voluntarily relinquished the $100 a month she had been receiving from the Public Relations fund was brought out, as well as the fact that her salary covers her duties as Managing Editor of the HAWAII MEDICAL JOURNAL as well as Executive Secretary of the Hawaii Territorial Medical Association.

ACTION: Dr. McArthur moved that Mrs. Bennett's salary be increased $50 per month. Dr. Orenstein seconded the motion and it was carried with one dissenting vote—that of Dr. Hill.

ACTION: Dr. Pinkerton moved, seconded by Dr. Orenstein, that the allowance for the A.M.A. delegate and alternate be increased to $200 each for the June meeting in addition to travel cost and that the executive secretary be allowed $100 plus travel cost and that a reasonable accounting of their expenditures be submitted. With these changes the budget was unanimously approved as follows:

BUDGET FOR 1950-1951

Disbursements:		
Journal Expense	$8,600.00	
Salaries	7,600.00	
Rent	900.00	
Postage	400.00	
Supplies	150.00	
Taxes	190.00	
Auditing	75.00	
Telephone and Telegraph	185.00	
Travel (for president)	100.00	
Miscellaneous	165.00	
Honolulu Library	100.00	**(plus 1,150.00)***
A.M.A. Conventions	2,320.00**	
Dr. Hiscock Survey	100.00	
	$20,885.00	
Receipts:		
Journal Advertising	$7,400.00	
Journal Subscriptions	2,300.00	
Dues	9,475.00	
Annual Meeting	500.00	
Miscellaneous	100.00	
	$19,775.00	

* We estimate that we will donate $1,150.00 worth of books and journals to the Honolulu County Medical Library. The books will be received by the HAWAII MEDICAL JOURNAL from the publishers in return for reviewing these books in the Journal. The journals will be received free by extending exchange subscriptions of the HAWAII MEDICAL JOURNAL.

** The A.M.A. convention item is made up as follows:

For the San Francisco meeting in June:		
Three round trip fares to San Francisco for Dr. Hartwell, Dr. Orenstein and Mrs. Bennett	$ 993.60	
Hotel, meals and incidentals	500.00	
For the interim session (presumably in the east)		
One round trip fare	676.20	(this is N.Y. fare but we would cover actual fare)
Hotel, meals and incidentals	150.00	
	$2,319.80	

Territorial Association Office: The Honolulu County Medical Library has asked the Territorial Medical Association to relinquish the office space which it now occupies in the Mabel Smyth Building so that the Library may use it for additional stacks. They suggested that all the business of the Territorial Association be carried on in the same room with the Honolulu County Medical Society.

ACTION: Dr. Orenstein moved recommending to the House of Delegates that we do not favor relinquishing the Territorial office space to the Library.

There being no further business the meeting was adjourned at 12:15 a.m.

Respectfully submitted,
I. L. TILDEN, M.D.
Secretary

MINUTES OF MEETING HOUSE OF DELEGATES

Friday, May 5, 1950 at 2:00 p.m.
American Legion Hall, Hilo, Hawaii

Present: Dr. Crawford (Hawaii), presiding; Drs. Bernstein (Hawaii), S. Yee (Honolulu), Goodhue (Kauai), Tilden (Honolulu), Yuen and Bergin (Hawaii), J. Bell, Felix Gotshalk, Spencer, Amlin, Chun, Nance, Ng Kamsat, Dodge, Frazer and Herter (Honolulu), Dr. Kemp (Kauai), Drs. Fleming and Shimokawa (Maui), Dr. Hill (president-elect) and other members of the Territorial Medical Association.

Reports: The following reports were read, accepted and placed on file:

Component Societies
1. Hawaii County—Dr. Robert M. Miyamoto
2. Honolulu County—Dr. John W. Devereux
3. Kauai County—Dr. K. K. Fujii
4. Maui County—Dr. Robert F. Cole

Officers:
5. Report of the Secretary—Dr. I. L. Tilden
6. Report of the Treasurer—Dr. E. K. Chung-Hoon

Since it was then time to start the scientific session, the President announced that the remaining reports would be read at the next session of the House of Delegates.

The meeting was adjourned to meet again on Saturday morning, May 6.

Respectfully submitted,

I. L. TILDEN, M.D.
Secretary

SUMMARY OF ACTIVITIES OF THE HAWAII COUNTY MEDICAL SOCIETY

Twelve regular monthly meetings and three special meetings were held during the year.

Eight scientific programs were presented as follows:

May: Panel discussion on Cancer with Dr. George Pack of Memorial Hospital, New York City.
May: "The Emotional Development of the Child" by Dr. Hale Shirley of Stanford University School of Medicine.
June: "Common Skin Diseases" by Dr. Harold Johnson.
August: "Rehabilitation" by Commander T. J. Canty, MC, USN.
September: "Congenital Dislocations of the Hip" by Dr. Richard Dodge.
October: "Cytologic Technique" by Dr. Walter Quisenberry.
December: "Bradycardia and Tachycardia" by Dr. Alfred Hartwell.
February: "The Practice of Medicine" by Dr. Joseph L. Baer of Chicago, Illinois.

In addition, the following programs were also held:

July: Panel discussion on Veterans' Medical and Hospitalization problems with Dr. M. T. Sax of the V. A. Regional Office in Honolulu.
January: Panel discussion on Medical Care of Indigents with subcommittee on Hospitals, Medical Care, and Welfare of the Holdover Committee of the Legislature.

Two amendments to the Constitution and By-Laws, (1) creating the position of honorary membership in the Hawaii County Medical Society and (2) allowing for waiver of initiation fees under certain conditions, were passed.

Dr. Archie Orenstein was appointed the representative of this society to the Board of HMSA.

Dr. L. L. Sexton was elected to honorary membership.

Dr. Harold Sexton transferred to the Honolulu County Medical Society.

A resolution against Compulsory Health Insurance was drafted and sent to President Truman and to Delegate Joseph Farrington.

A Disaster Council, composed of Drs. Orenstein, Crawford, and Mizuire from Hilo and Drs. Carter and Seymour from the outside districts, was elected.

New members admitted during the year were Drs. Frederick Lam and John J. Milford.

Dr. Frederick Lam transferred to Honolulu County Medical Society.

The Society purchased a refrigerator for the Blood Bank.

Dr. Orenstein was appointed temporary chairman of the County Advisory Committee to the Medical Advisory group of the Subcommittee on Hospitals, Medical Care, and Welfare of the Holdover Committee.

MD automobile emblems with "Hawaii County Medical Society" engraved on them were obtained for the membership.

To mark the Silver Anniversary of the Society, the membership presented to Drs. Brown, Carter, and Orenstein, three of the charter members still associated with the Society, sterling silver ash trays with suitable engravings. This presentation was carried out at the annual meeting.

The annual meeting was held at Izumoto Tea House in Hilo where Dr. George Tomoguchi was host to the membership at a chicken-hekka dinner.

Respectfully submitted,

PETE T. OKUMOTO, M.D., *Secretary*

SUMMARY OF ACTIVITIES OF THE HONOLULU COUNTY MEDICAL SOCIETY

Submitted is an abstract from the annual report by our retiring president, Dr. Harry L. Arnold, Jr., presented to the Honolulu County Medical Society for the year 1949-50.

Accomplishments:

(1) Amicable cooperation between our own members and a better relationship with community organizations has been realized.

(2) A committee was formed consisting of 13 physicians, appointed by and working under the Holdover Committee of the legislature, through its subcommittee of Health and Hospitals, to advise them on medical legislation. Their chief function has been to investigate various installations and methods of handling indigent medical care.

(3) The Honolulu County Medical Society has abolished its initiation fee.

(4) Near 170 of our Society are members of a group disability insurance plan.

(5) We are continuing to revise our contractual fee schedule.

(6) The Society has contributed generously to two important enterprises of general community interest and importance—the Hawaii Visitors Bureau and the Oahu Health Council.

(7) Dr. Robert Faus has replaced Dr. Fred Irwin as Medical Director of the H.M.S.A.

Unsolved Problems:

(1) The Medical Practice Act in its "residence clause" is ineffective. It requires, not a year's *physical* residence in the Territory, but merely a year's legal domicile.

(2) The prohibition against licensure of alien physisicians has been ruled unconstitutional by the Territory's Attorney General.

(3) The problem of transferring "free choice of physician" from the employer to the patient, in Workmen's Compensation case, should be negotiated with the employer and insurance groups well in advance of the 1951 session of the Legislature.

(4) Consideration should be given to the establishment of a physicians' service bureau, to handle credit ratings, collections and perhaps telephone and other services.

(5) The Socialization of medical practice has threatened us less than usual due to the widespread campaign against it waged by the A.M.A. and by voluntary health insurance plans.

(6) A plan should be devised to get more members out to attend our monthly meetings.

(7) Lastly, Dr. Arnold, Jr. was high in his praise for the cooperation, interest and support among the members of our society, the officers, the Board of Governors and the committee chairmen.

Respectfully submitted,

JOHN WM. DEVEREUX, M.D., *Secretary*

SUMMARY OF ACTIVITIES OF THE KAUAI COUNTY MEDICAL SOCIETY

The Kauai County Medical Society holds its monthly meetings at the G. N. Wilcox Memorial Hospital, Lihue, Kauai, T.H., on the second Wednesday of each month at 7:30 p.m.

Personnel:

1. The Society was shocked by the death of David Liu, M.D., in March, 1949. He was the physician for the McBryde Sugar Company for about four years and spent a few years of general practice in Kapaa, Kauai.

2. Dr. G. Bieber replaced Dr. Ernest Bickell at Kilauea and Kapaa. Dr. Bickell is at present in California.

3. Dr. K. Kuhlman took over duties at the Koloa

Plantation dispensary from January 1, 1950. He just finished internship at The Queen's Hospital and residence at St. Francis Hospital.

4. Dr. N. Steuerman finished his residency at the Wilcox Memorial Hospital and became an assistant to Dr. William Goodhue at the McBryde dispensary.

Activities:

1. Dr. Nils P. Larsen spoke to the members on the old Hawaiian medicines in our April meeting.

2. Dr. Albert Pack from the Memorial Hospital in New York was on this Island of Kauai in May and spoke to the Society members on tumors.

3. Psychiatric fund was established for Dr. Lynn to conduct his program on Kauai. The fund is also used to defray expenses on other psychiatric problems.

4. Dr. Crawford, President of the Territorial Medical Association, was present at one of the regular meetings and discussed various questions concerning the Territorial Medical Association.

5. Dr. James Mason, secretary-treasurer of the Kauai County Medical Society, left Kauai and was replaced by Dr. Kenneth Fujii as secretary-treasurer.

6. Dr. Joseph Strode was the guest speaker in the Society's November meeting by request and spoke on surgery in general. For a clearer picture surgical slides were shown.

7. Guest speaker for the December meeting was Dr. Donald Marshall who spoke on diseases and care of children. Also in this meeting, there was a short discussion on drunk driving with the captain of the police force of Lihue. Dr. Fennel, who was visiting the Island at that time, sat in on the discussions. He claimed that there were too many loopholes in the alcoholic tests and that it wasn't worth a continental whoop.

8. Dr. Guensberg showed a film on therapy on the Territorial Hospital.

9. The members of the Kauai County Medical Society unanimously approved the project presented by the Hawaii Heart Association of assisting the physicians of the Territory in the care of heart disease.

Respectfully submitted,

K. K. Fujii, M.D., *Secretary*

SUMMARY OF ACTIVITIES OF THE MAUI COUNTY MEDICAL SOCIETY

The Maui County Medical Society had eight meetings during the year, March, 1949, to March, 1950; of these meetings two were business; two were business and scientific and four were scientific. Guest speakers were Drs. Pack, Bowles, Baer, Quisenberry, Shirley, Stitt, and Wiig. There were two meetings of the Board of Governors.

During the year the Society lost the following members:

By death—Dr. William Osmers (Honorary Member)
By transfer—
Dr. A. J. Beland (Resigned, Surgical Resident at Nicholas V.A. Hospital)
Dr. R. J. Ecklund (to Orange County)

The Society gained the following members:

Dr. Joseph E. Ferkany (elected)
Dr. Elmer Johnson (elected)
Dr. Thomas Mar (transfer from Honolulu)
Dr. Joseph E. Molloy (elected)
Dr. Seiya Ohata (transfer from Illinois)
Dr. Sau Ki Wong (transfer from Honolulu)

At present there are no resident doctors on Maui who are not members of the Maui County Medical Society.

There are two Honorary Members:

Dr. William Dunn
Dr. Gordon Lightner

There are 29 active members in the Society.

The Society as a whole has been active in the support of the non-socializing of medicine, the Cancer Society, and the formation of an Advisory Group to the Holdover Committee on Hospitals, Medical Care, Health and Welfare.

Respectfully submitted,

Robert F. Cole, M.D., *Secretary*

REPORT OF THE SECRETARY

The total membership of the Association in all classes is 490, of which 379 (11 more than last year) are paid regular members. By counties this membership is made up as follows:

	REGULAR MEMBERS	ASSOCIATE MEMBERS	RETIRED MEMBERS	LIFE MEMBERS	HONORARY MEMBERS	ON LEAVE	TOTAL, ALL CLASSES
Hawaii	41	....	....	....	3	2	46
Honolulu	296	72	6	9	16	....	399
Kauai	13	....	....	....	1	....	14
Maui	29	....	....	....	2	....	31
	379	72	6	9	22	2	490

The total number of physicians licensed to practice medicine in the Territory of Hawaii as of January 31, 1950, is 539. Of this number only 501 are now residing in the Territory. Of these, 472, or approximately 94 per cent, belong to the Hawaii Territorial Medical Association.

Respectfully submitted,

I. L. Tilden, M.D., *Secretary*

REPORT OF THE TREASURER

For many years the Hawaii Territorial Medical Association made no contribution whatsoever toward the expenses of the delegate who represented us officially at all A.M.A. meetings. As you know, there are now two A.M.A. meetings on the mainland each year at which it is important for Hawaii to be represented. In 1947 at our annual territorial meeting on Kauai, for the first time action was taken to provide funds for the travel expenses of the delegate and executive secretary and half the expenses for the alternate delegate. Since so much of the A.M.A. business in recent years has been closely connected with the public relations assessment, it was agreed to pay the expenses out of the special public relations assessment. We have followed a similar practice in succeeding years. During the year just completed, it was felt that both our delegate and our alternate delegate should be adequately compensated for the expenses they incurred in carrying on our business at the A.M.A., so a sum of $800 was paid from the Territorial Association funds in addition to the amount appropriated from the public relations assessment.

We now realize the time has come for the Territorial Medical Association to assume this financial responsibility for its official representatives and reimburse them for their necessary expenses. As your treasurer, I should like to urge that provision for this expense be included annually in the budget of the Territorial Medical Association itself, rather than depend on special assessments for the purpose. In order to include this item with our

other operating expenses, it is necessary to increase the annual dues from $20 to $25 per member (in addition to the $2 JOURNAL subscription). I recommend that the Delegates take such action at this annual meeting. The Honolulu Society has already increased its annual dues to provide for this item.

In December, 1949, we were notified that unless we made a deposit in our savings account before December 31, we would receive no further interest because we had not made a deposit for five years. We then had $848.71 in the savings account and the remainder of our funds in a checking account. We conferred with members of the Council and with their consent we deposited $2,200 in the savings account, which we felt left a safe margin in the checking account for operating expenses.

The Hawaii Territorial Medical Association began its fiscal year on March 1, 1949, with a balance of $8,-281.12. This sum includes the checking account, savings account and petty cash fund, but does not include the public service committee funds, which are handled separately and will be reported on by the public service committee.

Our receipts for the year were $19,540.70. Of this amount, $7,380 was from dues, $9,645.63 from the HAWAII MEDICAL JOURNAL advertising, subscriptions and sales, and the balance from annual meeting, interest and miscellaneous.

The disbursements for the year were $17,413.90 as follows:

Journal Expense	$ 8,411.29	
Salaries	6,180.14	
Rent	840.00	
Postage	392.72	
Supplies	99.95	
Taxes	45.03	
Auditing	75.00	
Telephone and Telegraph	152.73	
Travel (by the president)	193.73	
Miscellaneous	108.31	
Library*		($1,126.75)
Furniture and Fixtures	115.00	
A.M.A. convention travel	800.00	
	$17,413.90*	

* Plus books to the value of $576.75 and journal subscriptions worth about $550.00 which we donated to the Honolulu County Medical Library.

We closed our fiscal year on February 28, 1950, with a balance of $10,407.92. The accounts have been audited and found in good condition. The auditor's report is attached hereto.

Respectfully submitted,
EDWIN K. CHUNG-HOON, JR., M.D., *Treasurer*

MINUTES OF MEETING
HOUSE OF DELEGATES

Saturday, May 6, 1950 at 9:00 a.m.
American Legion Hall, Hilo, Hawaii

Present: Dr. Crawford (Hawaii) presiding, Drs. Bernstein (Hawaii), S. Yee (Honolulu), Goodhue (Kauai), Tilden (Honolulu), Seymour and Yuen (Hawaii), J. Bell, Felix, Gotshalk, Spencer, Amlin, Chun, Nance, Ng Kamsat, Dodge, Frazer and Herter (Honolulu), Kemp (Kauai), Fleming and Shimokawa (Maui), Dr. Hill (president-elect) and other members of the Association.

Reports: The following reports were read, accepted and placed on file:

1. Cancer Committee—Dr. Grover A. Batten
2. Advisory Committee, Woman's Auxiliary—Dr. Grover A. Batten
3. Legislative Committee—Dr. Robert B. Faus
4. Mabel Smyth Board of Management—Dr. Rodney T. West
5. Psychiatry and Neurology Committee—Dr. Marcus Guensberg
6. Health Education Committee—Dr. Marie K. Faus
7. Emergency Medical Service Committee—Dr. Robert B. Faus (Accepted with appreciation)
8. HAWAII MEDICAL JOURNAL—Dr. Harry L. Arnold, Jr.
9. Public Service Committee—Dr. Frederick L. Giles (It was made clear that acceptance of the report did not include any action on its recommendations.)
10. Advisory Committee to the Bureau of Maternal and Child Health—Dr. F. D. Nance (In accepting this report, the Delegates approved its recommendations.)
11. Advisory Committee to the Bureau of Crippled Children—Dr. R. B. Cloward (In reply to a question, Dr. Stitt stated that after diagnostic services are performed there is a means test. Where parents can afford to pay, they do so to the extent of their ability. In accepting this report, the delegates approved its recommendations.)

Next Annual Meeting: On motion of Dr. Amlin, seconded by Dr. Herter, the registration fee for the next annual meeting was set at $10. Dr. Yee moved that the meeting be held the first weekend in May, 1951 in Honolulu. The motion was seconded by Dr. Chun and passed.

Finances: The budget, as aproved by the Council, was submitted to the Delegates and discussed. Dr. Hill said he felt that the budget should be submitted to the House of Delegates for approval. The President said this had been the custom, though it is not required by the By-Laws. Dr. Spencer raised the question of the necessity of sending the executive secretary to the A.M.A. convention. The allotment for expenses of the delegate, alternate delegate and executive secretary for the A.M.A. meeting and the salaries item were discussed.

ACTION: On motion of Dr. Spencer, seconded by Dr. Amlin, the Delegates approved the budget item for A.M.A. delegates' expenses. (Dr. Frazer and Dr. Gotshalk were opposed.)

ACTION: Dr. Yee moved that the budget be approved. The motion was seconded by Dr. Kemp and passed.

Dues: The County Medical Societies had all been notified of a proposal to raise the dues from $20 to $25 per member this year, in addition to the $2 JOURNAL subscription. The added income is needed to provide funds for the travel expenses of the Association's representatives at the A.M.A. meetings.

ACTION: Dr. Spencer moved that the dues be increased to $25. Dr. Yuen seconded the motion, which passed with two dissenting votes—Dr. Frazer and Dr. Gotshalk.

A.M.A. Post-Convention Meeting: The Honolulu County Medical Society and the Hawaii Territorial Medical Association have invited doctors and their families from the mainland to visit Hawaii after the A.M.A. convention in San Francisco June 26-30. A brief scientific meeting for the visiting doctors will be held on July 6 in Honolulu.

ACTION: Dr. Spencer moved that the July 6 meeting be a stated meeting of the Hawaii Territorial Medical Association, at which meeting no business is to be transacted. The motion was seconded by Dr. Felix and passed.

Office Space: The President of the Territorial Medical Association had received a letter from the Board of Governors of the Honolulu County Medical Library requesting the Territorial Association to vacate the office presently being used by Mrs. Bennett in order that it might be used for Library stacks. The request had been discussed at a joint meeting of the Honolulu County Medical Society Board of Governors and the Honolulu delegates to the Territorial Medical Association. Dr. Spencer said he felt that this move would not solve the Library's problem.

ACTION: On motion of Dr. Spencer, seconded by Dr. Yee, the Delegates denied the Library's request for space and suggested that the Library Board plan for an annex elsewhere.

One Year Residence Law: This subject was for information only rather than action, since a committee is studying all laws relating to medicine in the Territory. Dr. Tilden reported the results of the questionnaire sent to the doctors by the Board of Medical Examiners. Replies were received from about 85% of the doctors. There were 81.6% in favor of keeping the one year residence requirement for medical licensure, 16% opposed, and the balance expressed no opinion.

Legislation: Dr. Majoska asked that the Hawaii Territorial Medical Association take action to see that the medical examiner's system was instituted in Hawaii rather than the present coroner's system, which is completely inadequate.

ACTION: Dr. Bell moved that the new President appoint a committee to study the present law regarding coroners and make recommendations at the next meeting of the House of Delegates.

Hawaii Medical Service Association: No action was taken regarding HMSA contracts with individual doctors.

Public Relations: Dr. Hill said he would be opposed to any additional fee or assessment at this time. HMSA, he said, is one of the greatest factors in our public relations program, and that is improving under Dr. Faus's guidance. Also the medical advisory committee is working with the legislature in taking care of legislation.

ACTION: Dr. Gotshalk moved that the public relations program be referred to the incoming officers for decision and disposition. The motion was seconded by Dr. Herter and passed.

Oahu Health Council: The Honolulu County Medical Society has taken a $500 membership in the Oahu Health Council. The Delegates discussed whether the Territorial Medical Association should become a member, paying from $10 to $500. This would give the doctors more representation in the Oahu Health Council. The point was brought up that the other county medical societies might also join.

ACTION: Dr. Spencer moved that the Territorial Medical Association should not become a contributing member of the Oahu Health Council. Dr. Gotshalk seconded the motion and it passed by a 10 to 5 vote.

Life Insurance Examination Fees: It was reported that the Council had voted to refer the matter of increase in life insurance examination fees to our A.M.A. delegate with the recommendation that he promote increased life insurance examination fees.

ACTION: On motion of Dr. Felix, seconded by Dr. Goodhue, the House of Delegates voted to accept the motion of the Council regarding life insurance examination fees.

Amendments to By-Laws: Dr. Herter proposed amending the By-Laws to add Chapter IX Section 5: "The House of Delegates must approve the budget for the fiscal year."

Dr. Gotshalk said he would like the By-Laws amendment being presented at this 1950 meeting to specify that there shall be an interim session of the House of Delegates to be called by the President approximately six months after the annual session.

Dr. Gotshalk proposed amending the By-Laws to add Chapter VII Section 7: "All nominations for officers of the Association shall be submitted to the membership of the component societies at least two weeks before the annual meeting."

Election of Officers: The report of the Nominating Committee was presented by Dr. Bernstein and nominations were presented from the floor. The results of the written ballot were as follows:

President-elect: Dr. Harry L. Arnold, Jr.

Councillors: Dr. Archie Orenstein (Hawaii) for three years. Dr. Richard K. C. Lee (Honolulu) for three years. Dr. Herbert Rothwell (Honolulu) for one year.

The meeting was adjourned.

Respectfully submitted,
I. L. TILDEN, M.D., *Secretary*

REPORT OF THE CANCER COMMITTEE

This report will emphasize the cooperative aspects of the cancer control program rather than specific activities of the Cancer Committee of the Territorial Medical Association. The cooperation between the various agencies, interested in the cancer program, has been excellent. The Territorial Medical Association, County Societies and individual doctors have participated with the Cancer Society and the Health Department in many aspects of the cancer control program.

1. *Public Education*—The public education program has been primarily fostered and promoted by the Hawaii Cancer Society. Organized medical groups as well as individual doctors have devoted a great deal of time and effort in the promotion of this activity. All materials used in the educational program have been cleared with the appropriate medical authorities. Pamphlets printed locally in English, as well as other languages have been carefully studied by physicians of different racial extractions. Recognizing the danger of causing undue fear and anxiety in the minds of a great many people, the Cancer Society has worked out a very careful program of education using a film which emphasizes the hopeful aspects of the cancer problem, and using physicians as speakers whenever possible along with the film. The times when physicians are not available, persons with extensive public health training and experience have accompanied the film. By and large the reaction has been very good. Groups have been asked, wherever possible, for their reaction. There seems to be almost unanimous feeling among those participating in the program that the element of fear has been, to some degree, replaced by better comprehension. Since December 1, 1949, one hour programs with the film and speaker have been presented to 145 groups, totalling approximately 10,000 persons. Numerous persons have sought medical attention as a result of these programs and to my knowledge there is no evidence of mass hysteria or undue apprehension.
2. *Professional Education*—The program of professional education has been under the direct supervision of a committee of the Hawaii Cancer Society, headed by Dr. Laurence M. Wiig. During the past year, you will all remember, we had the visit of Dr. George T. Pack. The Cancer Society has distributed the Cancer Bulletin to practically all physicians in the Territory. You are all familiar with this publication and aware of its value, I am sure. The Cancer Society appropriated $400 to the Medical Library of the Mabel Smyth Building for the purchase of books and other reference material on cancer. During the first part of April several meetings, including a tumor clinic were held with visiting physicians from the Mayo Clinic. Those meetings were extremely valuable to those who were able to attend. Unfortunately time did not permit these physicians' visiting other islands.
3. *Cytology Laboratory Service*—Hawaii is one of the few places in the United States operating a cytologic laboratory as a community service. During the first eight months 2452 slides have been stained and examined on 835 patients. As a result of this service 17 cases of cancer have been discovered with 5 unsuspected by either the patient or physician. As you know this service extends to all of the islands. Somewhat to our chagrin we find that physicians in rural Oahu and on the other islands are making better use of this service than physicians in Honolulu. The special committee in charge of this service, composed of Drs. Spencer, chairman, Tilden and Quisenberry, have done an excellent job in the establishment and supervision of this laboratory service.
4. *Home Nursing Education Service*—Many physicians have referred patients for home educational nursing service offered by the Hawaii Cancer Society in Honolulu. In many instances the service has added much to the comfort and morale of the cancer patient.
5. *Research*—The five year morbidity study conducted under the Bureau of Cancer Control of the Territorial Board of Health is moving towards completion. Federal funds were allotted for this purpose and the general supervision has been under Dr. Walter Quisenberry, the Territorial Medical Association and the Cancer Society has assisted in the general supervision of this project.
6. *Tumor Clinics*—Dr. Quisenberry's supervision of the tumor clinics at Queen's and St. Francis have provided excellent services. These clinics meet weekly alternating between the two hospitals. Approximately 40 to 50 doctors attend these clinics. In addition to providing excellent consultative services for individual physicians and their patients these tumor clinics have had immeasurable value in the field of professional education. The exchange of ideas and the general discussions growing out of the wide variety of cases has added greatly to the general knowledge of the disease and its treatment.

Respectfully submitted,
G. A. BATTEN, *Chairman*

REPORT OF THE ADVISORY COUNCIL FOR THE WOMAN'S AUXILIARY TO THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

During the year this committee approved the following:

1. That help be extended to the Cancer Society in every way possible.
2. Recommend that files be left at the Mabel Smyth Building.
3. That Mrs. E. C. Bennett be empowered to conduct mainland correspondence.
4. That the permission be granted the Auxiliary to take such action as might be necessary to help educate the public concerning the pitfalls of Socialized Medicine.
5. Discussion concerning the advisability and practicability of becoming a component Auxiliary was had. No conclusion reached, other than that the subject should be explored further.

Respectfully submitted,
G. A. BATTEN, *Chairman*

REPORT OF THE LEGISLATIVE COMMITTEE

Since there were no sessions of the Legislature this year and no other business to consider, the Legislative Committee held no meetings and took no action.

Respectfully submitted,
R. B. FAUS, M.D., *Chairman*

REPORT OF THE BOARD OF MANAGEMENT MABEL L. SMYTH BUILDING

On January 1, 1949, the Mabel L. Smyth Memorial Building had a cash balance of $6,609.24 in its operating fund. The year closed with a balance of $2,071.54.

After nine years of hard use, some major repairs have been necessary—painting, upholstering, refinishing of floors, new carpets, an entirely new public address system, new and modern lamps in the library, a temporary electric installation replaced by a permanent one and numerous smaller items. All this has meant an expenditure of over $6,000.00.

Office rentals have been appraised and some changes made in rates.

All departments are feeling the need of more working space; therefore, the Board at its meeting January 10 voted to start a Building Fund that we may sometime within the next few years build an addition. Our first project was a showing of Curtis Nagel's film "Scandinavia," which netted us $132.10, a small beginning. If any of you have suggestions about raising money, they will be welcomed by the Board of Management.

During the year, eight auditorium chairs have been sold, and marked as memorials; sixteen chairs remain to be sold at $15.00 each.

The Board wishes the doctors to know that the lounge and its facilities are available for their private entertaining—all arrangements can be made with the manager.

The present Board members are: from the Territorial Nurses' Association, Mrs. Schattenburg and Mrs. Storme; from the Board of Trustees of The Queen's Hospital, Mr. A. L. Y. Ward, and from the Territorial Medical Association, Dr. Ito and myself.

Respectfully submitted,
RODNEY T. WEST, M.D.

REPORT OF THE COMMITTEE ON PSYCHIATRY AND NEUROLOGY

The Committee made every effort to continue the column "Psychiatric Comment" and to prepare papers on psychiatry and allied fields for the HAWAII MEDICAL JOURNAL. These efforts have been quite successful.

Due to the fact that members of the committee are scattered throughout the islands, it was impossible to have a meeting of the entire committee during the year. It might be advisable in the future to have the majority of the members of the committee selected from physicians residing on Oahu, to make possible occasional meetings and plan a more comprehensive program of activities in order to bring psychiatry and neurology closer to the general practitioner.

Respectfully submitted,
MARCUS GUENSBERG, M.D., *Chairman*

REPORT OF THE HEALTH EDUCATION COMMITTEE

The Health Education Committee of the Territorial Medical Association has been quite active this year and has worked with the Public Service Committee who generously allowed us the use of part of their funds.

This, we used to pay for spot announcements before and after the public service time donated by the radio stations, and to pay the cost of program that originated weekly at the A.M.A. headquarters. $1,061.00 was spent in all. The programs were on the air every week from July 9th to March 25th. These were heard in all the islands and apparently appreciated though we have no way of proving this.

The spot announcements were made by the local doctors themselves under their own names. Recordings of the introductions were cut because of the inconvenience of having to appear at the stations each week.

Dr. Larsen and Dr. Chalmers and I made a thirteen minute record using "The Ancient Medical Arts of Hawaii" as the subject. This was put on twice by the Aloha Network—once during the yearly meeting of the plantation doctors on Maui and was heard at their banquet. The first time was donated by KHON and the second paid for by the plantation doctors themselves. Many spoke of this and liked it.

Jimmy Walker put on a luncheon program in the Young Hotel where he saluted the doctors. At this I made the introductory remarks. Several of the doctors themselves heard this program and approved it. It cost the Society nothing.

The following programs were produced:

On KGMB — Twelve, 15 minute programs
Fair and Cooler.....cost $8.33 a program

On KULA — Thirteen, 15 minute programs
Keeping Your Baby Well.....cost $8.00
This was listened to by the members of the Kalihi Health Conference.

On KHON — Sixteen, 15 minute programs
The Story of Surgery and six programs
Doctors Make History.....cost $7.50

On KPOA — Fifteen, 15 minute programs
That Wonderful Feeling.....cost $11.52

On KGU — One program weekly from July 9 to March 25 continuously called "Your Health Today." This originated in Chicago and we paid the transcribing cost of $15.52 a program and it was by far the most expensive program we sponsored. Those who listened from time to time thought it was very good.

Again, I wish to recommend that praise be used generously by the Society.

Respectfully submitted,
MARIE FAUS, M.D.
Chairman

REPORT OF THE EMERGENCY MEDICAL SERVICE COMMITTEE

The Preparedness Committee met 3 times during the year. The primary purpose of those meetings was to assign physicians in their respective capacities for any emergency that might occur throughout the Territory.

If you will remember our national set-up, the National Security Resources Board has assigned to the Emergency Medical Committee of the American Medical Association the responsibility of furnishing physicians for the Armed Services and for the civilian services. Your committee, as established in the Territory, has met and assigned physicians to act as medical ad-

visors for 13 selective service boards and are presently called upon to assign 14 or more additional physicians for selective service boards. If the present plan passes Congress, it is anticipated that everyone between 18 and 65 years of age, men and women, will be registered. They will be assigned their respective jobs both in the civilian and military fields.

In addition to the Selective Service phase, your Emergency Medical Committee has considered the plan which we have made for any disaster that may occur in the Territory. That plan is a nebulous one and is going to be crystallized in the near future. During the past year nothing had been done by reason of the fact that the economy program of the Territory had not warranted the assignment of a director and a secretary to carry out the Emergency Medical Service as planned for civilian disaster; however, recently Colonel Cobb was appointed as the director* and a secretary chosen and in the near future you will hear much more of the activities of this civilian disaster program. I need not go into the general plan other than to mention the fact that its basis is an expansion of the normally existing facilities to take care of any disaster that may occur in the community. We would normally expect in metropolitan Honolulu that the City and County physician would be the one responsible for the collection and transportation of casualties to points of care. We expect that the physicians of this city would normally report to their respective hospitals and work as teams under the chief of the surgical service in each hospital. We urge that there be well organized plans prepared for each hospital so that they might utilize their facilities to the best advantage. However, there is much yet to be done in planning the evacuation of the present hospital and operation of hospitals in sites that are at least 5 miles from the epicenter of the location of the disaster, should it happen to be of A-bomb character.

I have attended both meetings of the Civil Defense Disaster Council called by Colonel Keeley. Representatives from the outside islands, as well as from Oahu, were present.

I have discussed civil defense planning with the president of each of our county medical societies. I find that the neighbor islands are pretty well informed now.

Surgical teams have been set up at the request of this committee. We are stressing now the organization of the medical profession into teams so they will be mobile in character—able to take care of anything at home or to move eleswhere and go to work.

As I write this report I am about to leave for Chicago to attend the semi-annual meeting of the Council on National Emergency Medical Service to be held at the AMA headquarters on May 6. I have accepted an invitation to participate in the round-table discussion of civil defense planning and problems at that meeting. I will also continue on to Washington, D.C. on business for the National Guard. There I will do everything I can to familiarize myself further with the civil defense program. There will undoubtedly be further information to report to you as soon as I return. I regret that my attendance at the national meeting in Chicago will prevent my being present at this annual meeting of the Hawaii Territorial Medical Association.

Respectfully submitted,

ROBERT B. FAUS, M.D.
Chairman

* Dr. Faus has since been appointed Director of the program.—ED.

REPORT OF THE HAWAII MEDICAL JOURNAL

During the past year, the financial status of your JOURNAL has been improved considerably, chiefly by reducing the number of pages of letterpress from an average of 49, to an average of 39, per issue, thus changing the previously somewhat extravagant ratio of letterpress to ads from 1.6 (in Volume 7) and 1.5 (in Volume 8)to 1.2 (in the first 4 issues of Volume 9).

The new special section entitled *Medical News,* edited by Dr. C. A. Domzalski, Jr., and begun in the March-April issue of 1949, has been continued and has proven as popular a feature as any of the others—that is, not a single reader has commented on it, either favorably or unfavorably, to any member of the editorial staff at any time. The section has recently been improved typographically by the use of a special boldface font of type for the key words and phrases in each paragraph. The same bold type has been used for doctors' names in the *Notes and News* section.

An innovation this past year, which it is proposed to continue, is the publication of the detailed minutes of each meeting of the Council of the Territorial Association.

The *Book Review* section contained 75 reviews in Volume 8, written by 58 physicians and nurses, an average of about 12 per issue. The average number of reviews in the first 4 issues of Volume 9 has risen to 15, and it is proposed to reduce this slightly by not reviewing all books received, as has been our practice in the past. Books not of particular interest to physicians here will be merely acknowledged by title at the end of the book review section. The value of this section of the JOURNAL to the Honolulu County Medical Library is considerable: the value of the 73 books received for review this past fiscal year was slightly over $575. Also contributed to the Library by the JOURNAL were 121 medical journals received in exchange, a value of $550.

The front cover, which had carried the complete table of contents of each issue since the January-February issue of 1948, was changed this year to include a Lilly advertisement. This is admittedly a step backward from the standpoint of artistic standards, but it was taken by your Editorial Board, with some misgivings, because it meant a net annual profit of approximately $318. The finer sensibilities of our readers do not seem to have suffered as a result of it: at least, no complaints have been received.

The average number of pages of advertising in each issue has increased rather sharply under Mrs. Bennett's able management, from 18 in the first three volumes to 31 in the last three, and this is reflected in the net cost of publishing the JOURNAL, which has decreased from a net loss of $200 on Volume 1 and $40 on each of the next two volumes, to a profit of $162 on Volume 7 and $1,260 on Volume 8. The detailed financial statement for the past fiscal year is shown in the Treasurer's Report.

Your Editorial Board members are not satisfied with the JOURNAL—and never expect to be—but we are pleased with it. We think it is a credit to the Association. We recommend its continued publication during the coming fiscal year, on the same basis as heretofore.

Respectfully submitted,

HARRY L. ARNOLD, Jr. M.D.
Editor

REPORT OF THE PUBLIC SERVICE COMMITTEE

The Public Service Committee of the Hawaii Territorial Medical Association began its duties following the annual meeting in May 1949.

One previous member of the committee remained to function on the committee which was appointed at this time. Shortly after the committee was appointed the Dental Society withdrew from the previously functioning Medical-Dental Public Relations Committee. Financial adjustments were made with the Dental Society so that there was no question that the Medical Association kept any part of the Dental Society funds. (See the financial report appended, for detailed information on this point.) From this time the committee of the Medical Association functioned alone to maintain as much as possible, on a greatly reduced budget, some of the more important aspects of the program which had been approved by the previous committee.

These consisted of:

1. Monthly news letters, edited and sent out by the committee to all members of the Territorial Medical Association. Previously these news letters had been prepared by a paid employee of the committee.

2. Organizational meetings throughout the Territory, particularly those being held in Honolulu, were given information as to the stand of the American Medical Association and the Territorial Medical Association on socialized medicine and other points such as the place of Labor in Government, the stand of the Medical Association on Communism, etc. Frequently, a booth containing literature sent out by the American Medical Association was maintained at these meetings. The Medical Library, Library of Hawaii and the University of Hawaii Library were supplied with literature including hearings of the Congressional Committee on socialized medicine, Brookings report on socialized medicine, etc. An exhibit was set up in each one of these libraries so that visitors to the library could see what was available for them should they desire more information.

This project with the University of Hawaii Library was set up at a time when debates were being given on socialized medicine and essays were being written for and against socialized medicine at the University.

As a result of the information set up and the attention drawn by the Territorial Medical Association committee, after the debates and essays were finished, the classes involved voted against socialized medicine by an overwhelming majority.

3. Resolutions have been obtained from various organizations throughout the Territory, including I.M.U.A. These resolutions have been sent to appropriate officials in the Government and the American Medical Association.

4. Literature received from the American Medical Association, has been distributed from time to time to the community, the Legislature and Labor leaders, to hospitals and to the key organizations and individuals throughout the Territory.

5. Legislative committees in the national Legislature have been informed at appropriate times as to our stand on certain controversial legislation, both by telegram and by letter. These legislative controversies have been interpreted and sent out to each member of the Territorial Association through the news letters or special news letters.

6. Radio programs have been maintained on various stations in the Territory throughout the year in conjunction with the Health Education Committee of the Territorial Medical Association. These programs have been highly recommended and have been obtained by us from the American Medical Association. These are not propaganda for or against socialized medicine, but are programs of a high type designed to educate the public as to the importance of the medical profession and the long history and traditionally high standards of ethics which the medical profession maintains. These programs total more than 14 hours of fifteen minute periods for the year.

7. The Public Service Committee has encouraged the Woman's Auxiliary to extend their membership to Hawaii and Kauai. The committee has requested and is working with the Woman's Auxiliary to strengthen their organization so that they too may be of more assistance in maintaining a constant public relations program.

Recommendations for the following year:

Having had the experience of serving both on the Public Service Committee and as chairman of the Public Service Committee for approximately 1½ years, definite impressions as to the effectiveness of various types of public relations programs are made. Also a great deal of information is gone over. This information is obtained through news letters from various states on the mainland, from public relations news letters of the American Medical Association and literally hundreds of thousands of news items and news letters and certain factors stand out:

1. That doctors as a whole know relatively little about conducting a public relations program. As a result, 22 states have employed full time public relations directors. I would recommend that the Territorial Medical Association employ a part time public relations director. Better public relations and a better public relations program would then result. A more efficient use of the monies would also result.

2. I would recommend that the medical profession, itself, continue to be completely informed by this committee on pertinent legislation being brought up in Congress, trends of medical legislation and other appropriate information, through the regular distribution of the news letter. It is imperative also that tbe public be completely informed as to the stand of the medical profession on various phases of medicine and medical legislation.

3. I would recommend that a definite part of the dues of the Territorial Medical Association be set aside as a continuing public relations fund. This should be set aside in adequate amount to cover all possible aspects during the year. These funds should be appropriated by the Council at regular intervals for the use and at the request of the Public Service Committee.

4. Lastly, I would recommend that the Territorial Medical Association and its members be more fully awakened to the importance of each individual in the scheme of public relations. Basically, it is the individual approach to the patient and his charges to the patient which promote most of all good public relations. I would recommend that the Territorial Association consider for future action, more stringent measures than are now in effect to maintain a higher ethical standard among the members of tbe Association and also to prevent excessive charges and unethical conduct.

FINANCIAL STATEMENT
May 1, 1949 to May 1, 1950

Balance on hand, May 1, 1949		$10,808.23
Receipts—Special assessment		104.00
		$10,912.23
Disbursements		
American Medical Association, Convention	$1,600.00	
Auditing	20.00	
Literature and research	247.00	
Washington Report, Marjorie Shearon, etc.		
Luncheon meetings	32.00	
Postage	189.29	
Printing	100.00	
Radio	1,070.09	
Salaries	637.67	
Secretarial Service (Mrs. Bolles))	1,109.51	
Space for exhibit at '49th State Fair	197.35	
Supplies	156.16	
Taxes	169.00	
Telephone and cables	31.15	
Refund to Hawaii Territorial Dental Society	3,251.00	
		8,810.22
Balance May 1, 1950		$ 2,102.01

Respectfully submitted,

F. L. GILES, M.D.
Chairman

ADVISORY COMMITTEE TO THE BUREAU OF MATERNAL AND CHILD HEALTH

The committee recommends:

1. That blood bank services be extended to areas where such services are not available, and that blood typing of all obstetric cases be done before delivery and that blood be available for immediate transfusion in all hospitals where obstetrics is done;

2. That the decision as to the number of children in a Child Health Conference session be left to the discretion of the doctor and nurse concerned;

3. That all hospitals make available direct personal supervision of obstetrical patients for at least one hour after delivery;

4. That the membership of the Territorial Medical Association give permission to the sub-committee on fetal and neonatal mortality to have full access to all hospital records on any maternal, fetal, or neonatal deaths and further,

That the President of the Territorial Medical Association, in his official capacity, request the Board of Directors of all hospitals in the Territory to make these records available to this committee;

5. That this committee be empowered to present selected cases of neonatal deaths from time to time for publication in the HAWAII MEDICAL JOURNAL, precautions being taken that presentations would be duly edited to prevent identification of infant, doctor, and hospital involved.

Respectfully submitted,

F. D. NANCE, M.D.
Chairman

ADVISORY COMMITTEE TO THE BUREAU OF CRIPPLED CHILDREN

The committee recommends:

1. That this committee bring to the attention of the Territorial Medical Society that there is a committee on the implementation of Act 29 (furthering educational opportunities for exceptional children). Mr. Clayton Chamberlain is chairman of the committee. This Advisory Committee recommends that the Territorial Medical Society offer medical advisory services to this implementation committee;

2. Because of the large number of cleft lip and palate and eye cases on the Bureau of Crippled Children register, the bureau be encouraged to further active interest in caring for these categories and

that in caring for cleft lip and palate, speech, orthodontia and prosthodontia be considered.

To this end, the committee recommends that a member of the Territorial Dental Association be invited to serve on the Bureau of Crippled Children Advisory Committee;

3. That the Medical Society be requested to back the Bureau of Crippled Children in requests for financial support for services to crippled children with particular reference to the appropriaton which passed the Territorial Legislature last year but was partially lost to the Bureau due to an accident in clerical recording.

Respectfully submitted,

R. B. CLOWARD, M.D.
Chairman

MINUTES OF MEETING GENERAL MEMBERSHIP

Saturday Afternoon, May 6, 1950
American Legion Hall, Hilo, Hawaii

Following the last scientific session of the meeting, the President presented the following amendments to the By-Laws, which had been proposed at the 1949 annual meeting and duly circulated to the membership:

Chapter V Section 2. Add "(e) No Councillor shall serve for more than two consecutive terms or a maximum of three terms."

Chapter VI Section 3 (a) Add "There shall be an interim session of the House of Delegates to be called by the President approximately six months after the annual meeting.

ACTION: The first amendment was unanimously passed on motion of Dr. Arnold, Jr., seconded by Dr. Tilden.

ACTION: The second amendment was unanimously passed on motion of Dr. Fleming, seconded by Dr. Kemp.

The President briefly summarized the actions of the Council and House of Delegates and announced that the minutes would be printed in the JOURNAL.

After announcing the results of the election, Dr. Crawford introduced Dr. Hill, the new President, who assumed the chair. The meeting was adjourned following a brief speech by Dr. Hill.

Respectfully submitted,

I. L. TILDEN, M.D.
Secretary

P E D I A T R I C S

Excited Mother (on phone)-"Quickly, Doctor, my baby just drank a bottle of ink."

Doctor-"Incredible!"

Mother-"No, Doctor, Indelible!" (ho-hum)



Cadillac

If You've Earned It—Don't Hesitate!

There are countless people who have every right to be enjoying a Cadillac—but who, for one reason or another, are denying themselves the pleasure.

If this is happening to you—there must be a reason—and we think the following paragraphs may be of interest.

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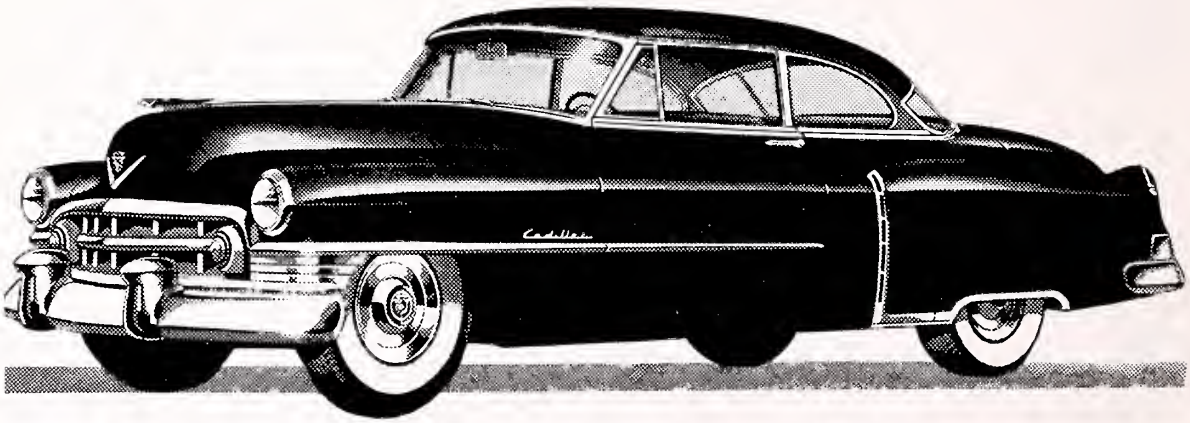
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Yes, if you have earned it, there is every reason why you ought to be driving a Cadillac—every *practical* reason, as well as every *personal* one.

This would be a wonderful year to make the move—for never before was Cadillac so beautiful—so luxurious—

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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OFFICIAL DEVELOPMENTS OF THE BIENNIAL CONVENTION

MABELCLAIRE NORMAN, R.N.*

The American Nurses' Association, largest organization of registered nurses in the nation, with 171,000 members, blazed trails into new territory at its sixteenth biennial convention, in San Francisco, May 7-12.

In 1896, when this organization really began, there were not more than 20 nurse delegates to attend the convention. And at that there wasn't a registered nurse on hand, since laws for the licensing of "white caps" were then unheard of. Some idea of how the ANA has expanded along with the nursing profession as a whole can be gleaned from the announcement that 5,817 nurses, all of them RN's, registered at the convention this year. The American Nurses' Association began operating 54 years ago on $100.00, every cent of it borrowed! Last year the Association collected well over a half million dollars in dues alone. It now has 171,000 members.

Unless you have attended a Biennial, you cannot imagine the thrill and feeling of pride that was felt by everyone who attended. To be a part of such a progressive organization and be able to absorb some of the thinking and opinions of many notable nurses, all striving to better the health of the country in a unified way, accounts for only a small portion of one's feeling of pride.

The floor of the huge Civic Auditorium in San Francisco was arranged for the House of Delegates, with the official delegates sitting under their respective state signs. Microphones dotted the aisles and in order to be recognized by the chair, a delegate wishing to speak had to stand on a little platform before the microphone and wait her turn. Each nurse identified herself by name and state each time she spoke. And your delegates from Hawaii contributed their part in this respect, too.



Delegates from Hawaii presented orchid leis on the opening day of the Biennial to the six national officers. Delegates from left to right, back row: Esther Higuchi Kikukawa, Oahu; Flora Ozaki, Oahu; Clara Mitchell, Hawaii. Front row: Elizabeth Sheridan, Maui; Harriet Kuwamoto, Oahu; Helen Gage, Kauai.

The first day, Monday, the opening business meeting of the House of Delegates was devoted to reports.

The second day the House really went to work. For the first time in its 54 years of existence, they voted to admit associate members. This amendment is expected to encourage inactive nurses to

* Executive Secretary, Nurses' Association.

retain their interest in their profession and to help nursing attain its present professional and economic objectives. This will mean that states' constitutions and by-laws can be amended to allow for the enrollment of such nurses. Also a Code of Professional Ethics for nurses was adopted. This code is well worth the reading time required for any nurse, for too often we all forget some of the basic factors we were taught as student nurses.

At this time also, the House of Delegates went on record as being in collective bargaining to stay when a move to strike from the ANA 1950-52 platform a reference to "collective bargaining" was defeated. This means that your organization can assist you greatly in attaining a greater degree of economic security for all nurses.

Wednesday's meeting was another exciting session. The nurses never failed to have expressions of great value and interest to present on every major subject that came before the House. On this day, it was asked that personal liability insurance be provided for nurses on a nationwide basis. This plan will be on an individual basis—that is, if a nurse desires to have such insurance (sometimes called malpractice insurance), she may obtain it through national headquarters. There is no stipulation regarding enrollment by group plan.

Thursday was the day for voting on the change in structure. There had been much preliminary discussion of the plans offered in section meetings previously, so that by the time the House of Delegates met on this day, the thinking of all had been fairly well crystallized. Some discussion ensued but it soon came before the house and they voted in favor of the two-organization structure plan, with reservations, to protect ANA's corporate status and limit the scope of the joint board. Thus ended an eleven year period of study and debate on this vital problem. However, we were all warned that we can expect no immediate change in the organization and that by the time of the next Biennial, we will then just begin to see the actual change from our present six-organization structure. With this before us, we hope to go on to even greater accomplishments in the next 50 years. Briefly, the two-organization plan will consist of one strictly professional organization, and one comprised of nurses and lay people jointly.

For some sixteen years there has been discussion at conventions about moving national headquarters. At this meeting they voted to retain permanent headquarters in the New York area and acquire if possible our "own home."

A request by the American Medical Association for adoption of a resolution condemning compulsory health insurance was tabled by the convention. Nurses indicated a desire to remain free to provide nursing service in any plan the American people adopt. They had previously gone on record as wanting to promote the inclusion of nursing care in all prepaid medical care and health plans.

Nurses again showed their interest in professional growth by requesting a five year series of studies of the nursing functions and showed their willingness to meet financial assessments to pay for the studies. This type of study should help determine the actual nursing functions of all members of the health team and out of this must come better nursing care and service for all concerned.

The evening meetings were interesting and well attended. The first evening Dr. Stafford L. Warren, School of Medicine, University of California at Los Angeles, spoke on the convention theme: Health—A Unifying World Influence: Nursing Accepts Its Role.

Tuesday evening's meeting was outstanding. A brilliant pageant, "The Challenge" was presented by a group of Bay Area Nurses together with a small professional cast. The pageant honored the 50th anniversary of the *American Journal of Nursing,* official publication of the American Nurses' Association and the National League of Nursing Education. In the fifty years of its existence, the *American Journal of Nursing* is just now having its third editor. The first editor, Miss Sophie Palmer, furnished a room in her home (in 1900) as an office, and for twelve years the *Journal's* editorial work was carried on there rent free. Light, heat and phone bills were paid out of the editor's own purse. About 600 copies of the first issue were printed in October 1900; today the monthly has a paid circulation of 107,500. Another indication of how our profession has grown and developed! The pageant was very impressive and the beauty of it was enhanced by the chorus of the Highland School of Nursing, Oakland, Calif., and by organ music. A definite challenge to all nurses for the future was presented and all felt the importance of this. Lt. General Albert C. Wedemeyer spoke on "Woman's Role in National Security."

Another stimulating speaker was Dr. Norman Reider, director of the Psychiatric Institute, Mt. Zion Hospital, San Francisco, who addressed the assembly on Thursday evening on "Human Needs and Nursing." His thought-provoking speech left everyone wondering if she had ever really taken stock of herself.

The closing session Friday afternoon was culminated in the announcement of the returns from

the election of our new national officers. Mrs. Elizabeth K. Porter of Cleveland, Ohio, director of advanced programs in nursing education at Western Reserve University was elected president for a two-year term to succeed Miss Pearl McIver of Washington, D.C. Our congratulations to Miss McIver for the wonderful manner in which she conducted a well-organized convention. Meetings took up and were dismissed promptly at the set times.

Miss Emilie G. Sargent of Detroit was elected president of the National Organization for Public Health Nursing. Miss Sargent is executive director of the Visiting Nurse Association of Detroit and succeeds Miss Ruth W. Hubbard of Philadelphia.

Miss Agnes Gelinas, of Skidmore College, was re-elected president of the National League of Nursing Education.

There were nurses present as guests from England, France, Canada, Argentina, Liberia, Japan, Greece, Norway, Sweden and Denmark.

To each of us who went to San Francisco, this inspiring convention was a "Highlight" in our chosen profession, and if we can bring back to the members here in the Territory some little bit of the pride and inspiration and fresh enthusiasms, we will have accomplished our purpose. Talk to your local delegate who attended and let her tell you first hand more about this inspiring convention.

SOCIAL HIGHLIGHTS OF THE BIENNIAL

When I arrived at the Plaza Hotel on Saturday evening, May 6, I was informed by the room clerk that our nurses from Hawaii had arrived safely that morning and "practically taken over the hotel." And I soon found he was right. The elevator man was wearing a faded lei very proudly; the desk clerk was also bedecked with a vanda orchid in his buttonhole. Very shortly several of the nurses appeared and were anxious to see the town.

Sunday was registration and so we loaded a shopping bag with leis and went down to the Civic Auditorium. Whenever anyone mentioned leis, we pulled out a lei and gave it to him in typical Hawaiian fashion. As a newspaper release put it: "Handing out leis with the happy abandon that only Islanders can show, the delegation, largest to attend a biennial nursing convention since the Island association was organized, were welcomed at every session."

Sunday night about fourteen of us invaded Omar Khayyam's for dinner and partook of such delectable delicacies as wild roast duck, shishkabob, and crackers almost the size of the table top. And to top it off, a dessert made of about 35 layers (more or less) of pastry, Ummm, ummm.

Every day the Hawaii Visitors Bureau flew in fresh flower leis to our eighteen delegates and this proved to be a badge of distinction. The nurses from Hawaii were then easily spotted (until they gave their leis away to someone) and this acted as an open door to everyone. Many crowded around and wanted to know how they could get a lei or could they just buy one, please. We usually saved our leis and gave them to someone special—an old friend or instructor, or a distinguished visitor from some foreign country. I gave my lei one day to the lady who is President of the Nurses' Association in Greece and she actually wept with happiness—she told me in broken English she had never seen or had anything so beautiful; others gave their leis to students here studying from France; another gave hers to a distinguished nurse from Japan. And "Flowers of Hawaii" sent us 500 vanda orchids which we gave out one day and were gratefully received by that many—and many were disappointed, too. One other thing that rather surprised us all, happened when we gave out the 500 paper leis the HVB sent us. They all disappeared in about five minutes and many hundreds (yes, hundreds) of people approached us asking for one; some who received them wore them the rest of the week. Toward the end of the week, one nurse from some state on the mainland remarked that it had been the "Sweetest smelling convention" she had ever attended. Since our return, we have received a letter from the Executive Secretary of the ANA, Miss Ella Best, thanking us for our contribution to the convention.

Monday afternoon at the opening meeting of the House of Delegates, when roll call was answered by six Hawaiian delegates, they got a huge round of applause. Then with our six delegates wearing Hawaiian dress, each of the six national officers were presented with orchid leis with the greeting given by our president, Harriet Kuwamoto—"Aloha from Hawaii." Again a big round of applause.

Every night most of the group went together to another of San Francisco's famous eating places. They had just about everything—Italian, French, Chinese, Swedish and Fish. The last night (Friday night) ten of us took one of the famous cable cars to Fishermen's Wharf. Needless to say, the ones who had never had this experience before were mighty thrilled. Going around the corners when the motorman and conductor yelled out "Hold on"—you really had to. Up one steep hill, and straight down another till it made you catch

your breath. Then the fun of Fishermen's Wharf —with the big boiling pots of water on the street, the smell of fish, the huge crabs and lobsters; and of course we had to buy some freshly boiled prawns and crack them open and eat as we walked along the wharf. And then, the fish dinner. Two of our members, I shall refrain from saying which ones (but they were about the smallest in size in the group) ate more fish than we thought was possible for two persons to stow away. And then a couple more bought lobsters and crabs afterwards to take back to their hotel room to eat later that night. If several of them didn't have nightmares that night, it was a miracle.

I could probably regale you for some time to come with many of the incidents that happened. For example, strawberries were in season and several of our nurses had strawberries which were actually as big around as half-dollars three times a day; or about the evening when riding on the cable car, one of our more attractive nurses was whistled at by a young man all of twelve years of age; and the time when walking back from the Top of the Mark a couple of the girls took off their shoes to be more comfortable.

We met lots of old friends and made many new ones. Some of the former residents of Hawaii that we encountered were Charlotte Kerr, Mildred McFerrin, Hilda Tedley Sutton, Genevieve Anderson, Josephine Hall, Vera Hansel, Theodora Floyd, Carol Keese, Marjorie McLaughlin, Miss Reichman, Rosie Kim Chang, and Betty Oberlies. All sent their greetings to everyone here.

As one delegate put it, "I knew it would be hard to be a delegate, but I didn't dream it would be this difficult. But I've enjoyed every moment of it all and am very glad I had the opportunity to come." How we all wished all of you could have gone and enjoyed every minute of a wonderful convention.

Miss Harriet Kuwamoto
Hawaii Nurses' Assaciatian
510 South Beretania Street
Honolulu 13, T. H.

Dear Miss Kuwamoto:

Naw that we have returned ta New York from San Francisco, we wish to take this opportunity to thank you for the beautiful leis which you were so generous in praviding all through the week of the Biennial Conventian. They added a great deal ta the decarations for the Biennial and we are most grateful to you.

We are sure your cantribution did much taward making the 1950 Biennial Canvention the most successful in the history of the American Nurses' Association.

Sincerely yours,

Ella Best, R.N.
Executive Secretary
American Nurses' Association

A CODE FOR PROFESSIONAL NURSES ADOPTED AT THE BIENNIAL 1950*

Professional nurses minister to the sick and assume responsibility for creating a physical, social and spiritual environment which will be conducive to recovery and stress the prevention of illness and promotion of health by teaching and example. They render health service to the individual, the family, and the community, and co-ordinate their services with members of other health professions concerned in specific situations.

Service to mankind is the primary function of nurses and the reason for the existence of the nursing profession. Need for nursing service is universal. Professional nursing service is therefore unrestricted by considerations of nationality, race, creed or color.

Inherent in the code is the fundamental concept that the nurse subscribes to the democratic values to which our country is committed.

With reference to the following statements, the profession recognizes that a professional code cannot cover in detail all the activities and relationships of nurses, some of which are conditioned by personal philosophies and beliefs.

1. The fundamental responsibility of the nurse is to conserve life and to promote health.

2. The professional nurse must not only be adequately prepared to practice, but can maintain professional status only by continued reading, study, observation and investigation.

3. When a patient requires continuous nursing service, the nurse must remain with the patient until assured that adequate relief is available.

4. The religious beliefs of patients must be respected.

5. Professional nurses hold in confidence all personal information entrusted to them.

6. A nurse recommends or gives medical treatment only in emergency and reports such action to a physician at the earliest possible moment.

7. The nurse is obligated to carry out the physician's orders intelligently, to avoid misunderstanding or inaccuracies by verifying orders and to refuse to participate in unethical practices.

8. The nurse sustains confidence in the physician and other members of the health team; incompetency or unethical conduct of associates in the health professions should be exposed but only to the proper authorities.

9. The nurse is entitled to just remuneration for services rendered and has a corresponding obligation to make conscientious return in service.

10. A nurse accepts only such compensation as the contract, actual or implied, provides. A professional worker does not accept tips or bribes.

11. Professional nurses do not permit their names to be used in connection with testimonials in the advertising of products.

12. The Golden Rule should guide the nurse in relationships with members of other professions and with nursing associates.

13. The nurse in private life adheres to standards of personal ethics which reflect credit upon the profession.

* Reprint from AJN 50:196, April 1950.

14. In personal conduct, professional nurses should not knowingly disregard the accepted patterns of behavior of the community in which they live and work.

15. The nurse as a citizen understands and upholds the laws and as a professional worker is especially concerned with those laws which affect the practice of medicine and nursing.

16. A nurse should participate and share responsibility with other citizens and health professions in promoting efforts to meet the health needs of the public—local, state, national and international.

17. A nurse recognizes and performs the duties of citizenship, such as voting and holding office when eligible; these duties include an appreciation of the social, economic and political factors which develop a desirable pattern of living together in a community.

THE LEAGUE OF NURSING EDUCATION MOVES FORWARD

A report of the National League of Nursing Education Convention, San Francisco, May 7-12, 1950

ARLENE N. THOMPSON*

In the history of nursing, the year 1950 will be an important milestone in nursing education. Nurses today are called upon to serve the community in a broader field than their sisters of a few years ago. In preparation for this greater service, educational standards must be maintained in order to effectively meet the needs of the public.

One of the important topics discussed during the Convention was that of the Interim Classification of Schools of Nursing offering basic professional programs. This consisted of a so-called "paper and pencil" survey of all 1200 schools of nursing in the United States. School programs were compared with each other, and those having the highest national ratings were placed in Group I or the upper 25% class. We in Hawaii should be very proud to know that The Queen's Hospital School of Nursing and the St. Francis Hospital School of Nursing have both won their places in this top group.

Another important report was that of the National Nursing Accrediting Service sponsored by the Six National Nursing Organizations in 1949. Since its establishment, much progress has been reported toward accrediting and approving programs. This service requires about a week to complete, and includes all types of programs of nursing education in institutions which apply for accreditation. Two accrediting nurse representatives make up a team to survey and evaluate each program. Under this new service, nursing school programs are classified into four categories: basic diploma, basic collegiate, public health, and supplementary and advanced. Many schools have applied for this service showing considerable interest toward the continuous improvement of our nursing education standards.

Miss Julia M. Miller (St. Barnabas, Minneapolis, Minn.; B.S., M.A., University of Minnesota), is acting director of the National Nursing Accrediting Service until July 1950. The new director will be Miss Helen Nahm (A.B., University of Missouri; University of Missouri School of Nursing; M.S., Ph.D., University of Minnesota).

Each member of the League of Nursing Education will soon have the privilege of helping to decide one of the greatest changes in our professional organizations. Cards will be sent to each so that she may indicate her desire regarding the change in structure. I hope that every Hawaii member will cooperate promptly in sending in her decision.

Three new state Leagues were accepted into the national organization—Arizona, Idaho and Oregon. This brings the total number of state chapters to 48, including Hawaii, Puerto Rico and Washington, D.C.

In looking ahead, here are some of the items for our 1950 League program:

1. Promote unified structure of nursing and move toward unity of action.
2. Continue to work with the Joint Commission on the Improvement of the Care of the Patient.
3. Develop and publicize statements of philosophy and objectives in nursing education.
4. Take leadership in developing a concerted plan of action for nursing education.

It was a privilege to attend the Biennial Nursing Convention. The next League Convention will be held in Boston, Massachusetts, May 7-11, 1951. I hope that Hawaii will have a delegate present.

REPORT OF THE COUNSELING AND PLACEMENT COMMITTEE

Since the last annual meeting of the Territorial Nurses' Association, the Counseling and Placement Committee has focused attention on developing policies to cover the practical nurse members of the Nursing Service Bureau. The policies agreed upon by this Committee have been submitted to the practical nurse group for consideration, and we are now awaiting comments from them.

A special Sub-committee of the regular Counseling and Placement Committee has been ap-

* President, Hawaii League of Nursing Education. Director of Nurses, Children's Hospital, Honolulu.

pointed to prepare personnel policies covering those individuals employed by the Territorial Nurses' Association. The Committee assisted by Mrs. Norman, Executive Secretary, has drawn up policies which were approved by the TNA Board of Directors at a recent meeting. The final draft of these policies will now be worked out with the Board for Licensing of Nurses.

In addition to the above, the Committee has reviewed and made recommendations in a number of situations particularly affecting the private duty nurses, both practical and professional, in matters relating to the Nursing Service Bureau.

ESTHER STUBBLEFIELD, *Chairman*

CANCER INSTITUTE FOR NURSES

Miss Dorothy Teall, Cancer Nurse Consultant, Department of Health, announces the programs for a Cancer Workshop and a Cancer Institute, this Fall. Senior Nurse Officer Rosalie I. Peterson, U. S. Public Health Service, chief nursing consultant for the National Cancer Control Institute will be in the Islands to assist with these programs.

The Cancer Workshop for University credit will be held October 2 through 14, in Honolulu. Included in this Workshop will be lectures, discussion and clinical observation. Following the Workshop, a two day Institute will be conducted on each of the following Islands, Oahu, Kauai, Maui and Hawaii.

All nurses are urged to attend either the Workshop or Institute. Applications are now open, and those interesed should contact Miss Teall at the Kapahulu Health Center as soon as possible.

PRACTICAL NURSE COURSE

On May 23, the Practical Nurse Training Course started its long awaited evening course. This is primarily intended at the present time to cover those in this area who are at present working under special permit from the Board for the Licensing of Nurses.

The course is designed to have one night a week for lecture and one practice session a week for a period of approximately two years. This will then enable the students to sit for the examination for a license as a practical nurse. Mrs. Nancy Ching is the instructor. Thirty people so far have enrolled and include Maluhia Home, Waimano Home, Queen's, Kuakini and St. Francis hospitals.

A similar course for those at the Territorial Hospital at Kaneohe is now in progress under the direction of Miss Olive Benson, Educational Director there.

ANNUAL TERRITORIAL CONVENTION

Set aside the dates of Sept. 27-28-29 for the annual Territorial Nurses Convention. This year we are planning a better than ever convention with new and stimulating slants on topics of great interest to you. Economic security is a subject close to everyone's mind these days, and we hope to have some outside speakers on this subject who can give you new ideas and hopes for the future. As yet the program is still in its formative stages, and other suggestions are welcome.

This year, it is time again to elect a new president, second vice-president, treasurer and three directors. When the nominating committee asks for help and suggestions, please be ready to assist them in every way.

Remember — Sept. 27-28-29 — Mabel Smyth Bldg., Honolulu.

PSYCHIATRIC AFFILIATION FOR BASIC STUDENTS

This September, the Territorial Hospital at Kaneohe will accept students from our three nursing schools here for a three months affiliation in psychiatric nursing. This is the first time such a course has been offered here in the islands and is a definite step forward in the complete education of the student nurse. Miss Olive Benson, Augustana School of Nursing, Chicago, Illinois, B.S., Ohio State, Menninger Clinic, Topeka, Kansas, and formerly educational director at Columbus State Hospital, Ohio, is the new educational director at the Territorial Hospital and is implementing the program. Very comfortable living accommodations are being prepared for the students and they will be given a well-rounded course in the principles and practices of psychiatric nursing.

With the approval of the Board for the Licensing of Nurses, the Territorial Hospital will offer a three months post-graduate course in psychiatric nursing. For deails of this course, please contact Miss Benson at Kaneohe.

NEWS

HONOLULU NEWS ITEMS

Mrs. Arlene Thompson, President of the Hawaii League of Nursing Education, was the recipient of a generous contribution from the McInerny Foundation which enabled her to attend the Biennial Convention as a League delegate during the session held in San Francisco May 8 to 12. The McInerny Foundation made a similar grant to the Hawaii League last year to send a delegate to the NLNE Convention held in Cleveland, Ohio.

Mrs. Patience C. Martelon, Director of Nurses, Leahi Hospital, participated in a panel discussion at the Administrator's Section of the Biennial on May 11. The topic was "Practical Nurses in Hospital Nursing Services."

Certificates were recently granted to two graduate nurses, **Michiko K. Chinna** and **Betty K. Ito,** upon completion of a two-month course in tuberculosis nursing at Leahi Hospital.

Mrs. Chinna, graduate of Kuakini Hospital School of Nursing 1944, had a four-month graduate course in obstetrics at the New York Hospital, and had been on the staff at Kuakini Hospital from 1944 to 1950.

Miss Ito, graduate of St. Francis Hospital School of Nursing 1949, spent three months in psychiatric nursing at St. Vincent's Sanatorium, Missouri, prior to her joining the staff at Leahi Hospital in March. A two months' leave of absence was granted in order that she might enroll in the tuberculosis nursing course. Both nurses joined the staff of Leahi Hospital after completion of the course.

Miss Margaret L. Nott, graduate of Butterworth Hospital, Grand Rapids, Michigan, formerly night supervisor at St. Francis Hospital, Honolulu, for two years, became Director of Nurses at Kapiolani Maternity and Gynecological Hospital replacing **Mrs. Gladys F. Jacobs,** in April. **Miss Nott** was Director of Nurses of an industrial hospital in Detroit, Michigan, prior to her coming to the Islands in 1948.

Mrs. Carol Gill, R.N., formerly Head Nurse at the Children's Hospital and office nurse for Dr. John H. Peyton, recently spent six months in Samoa, accompanying her husband, Mr. William Gill, sent there as a sugar expert.

Miss Alison McBride (Columbia-Presbyterian, New York), Assistant Director of Public Health Nursing, Department of Health, attended an intensive Group Dynamics training program in Bethel, Maine, June 25 through July 14, 1950. The object of this training program is to learn more about the meaning, value and methods of "group dynamics" as an important concept which is being widely accepted in all branches of education today. Funds for **Miss McBride's** program were made available by the McInerny Foundation and the Department of Health.

Miss Claire Canfield, formerly staff public health nurse, Department of Health, recently returned to accept the position of Mental Hygiene Nurse Consultant, following the completion of 18 months' training course at Teachers College, Columbia.

Mrs. Katie A. Chun, President of the Territorial Practical Nurse Association, attended the meeting of the newly organized National Federation of Licensed Practical Nurses, Incorporated, at the Hotel New Yorker, May 8 and 9, 1950. National President is Mrs. Lillian E. Kuster of New York City.

The Department of Health wishes to announce that both **Miss Teall** and **Miss Canfield** are available to hospitals and schools of nursing for consultation service at any time.

ELSIE HO, *Reporter*

NURSES' ASSOCIATION, COUNTY OF HAWAII

Mrs. Ramona McAfee, nurse at Parker Ranch, has been replaced by **Mrs. Ione Fenety** from Honolulu. **Mrs. McAfee** has returned to the mainland to attend university next year.

Mrs. Ruth Sakai, recently retired Kohala public health nurse, and her husband are on a mainland trip. They will attend the graduation of their daughter, Joan, from nurses' training school in St. Louis, Missouri.

Miss Emily Matsukawa, graduate of St. Francis Hospital 1948 and employed by Hutchinson Sugar Company at Naalehu, recently returned from a vacation in Honolulu.

Miss Christine Koda, graduate of St. Francis Hospital 1949, staff nurse at the Hawaiian Agricultural Company Hospital, Pahala, vacationed on Maui, Kauai and Oahu.

Miss Joyce Ishibashi, graduate of St. Francis Hospital 1950, recently joined the Pahala Hospital staff.

Miss Eunice Graham of Puumaile Hospital had a vacation in Honolulu with her mother before she returned to Canada.

Miss Mary Stanley of Puumaile Hospital visited with the Dr. Joseph Molloy family on Molokai recently. He was formerly resident physician at Puumaile.

Miss Minnie Shelton of Kohala Hospital joined her mother in Honolulu for a vacation. Her mother visited several weeks in the islands.

Mrs. Fumiko Sugiyama, former Kohala Hospital staff nurse, is the proud mother of a son born on April 20.

Miss Josephine Hall, retired Kona public health nurse now living in Junction City, Washington, has retained her membership in the Hawaii County Nurses Association. She attended the Biennial Convention of ANA in San Francisco.

Miss Clara Mitchell, delegate to ANA Biennial Convention, left for the mainland on May 5.

Miss Eleanor McClymonds of the Palaha Hospital staff is having a mainland vacation and attended the ANA Convention in San Francisco.

BESS HAMMER, *Secretary*

Hilo Memorial Hospital News

Mrs. Dorothy L. Kaladic of Colorado Springs, Colorado, arrived in January of this year to begin her duties as Director of Nurses.

Mr. Russell N. Tucker with Mrs. Tucker, arrived on April 15 from Cushing, Oklahoma, to become Superintendent of Hilo Memorial Hospital, replacing Mr. John A. Lindner who died in January of this year. Honoring the Tuckers, open house was held April 17. He is affiliated with the American College of Hospital Administrators.

Miss Betty Sue Wilson and **Mrs. Melinda Lopez** have recently joined the nursing staff. **Miss Wilson** comes from Eureka, California and is a graduate of St. Francis Hospital, San Francisco.

We regret losing **Miss Mildred Kohatsu** from our Obstetrics Department. She has left for Chicago where she will work at Maternal Health Center.

Miss Margaret Sanemitsu, one of the latest practical nurse graduates, is leaving to work at Kohala Hospital.

Miss Margaret Cushingham has resigned and plans to do post-graduate work this fall.

Mrs. Jean Ikawa, Mrs. Signe Luscomb and **Mrs. Caroline Koehnen** are on leave and we hope to see them back before long.

Mrs. Helen Rosehill is a temporary member of the staff.

GLADYS L. CHUN

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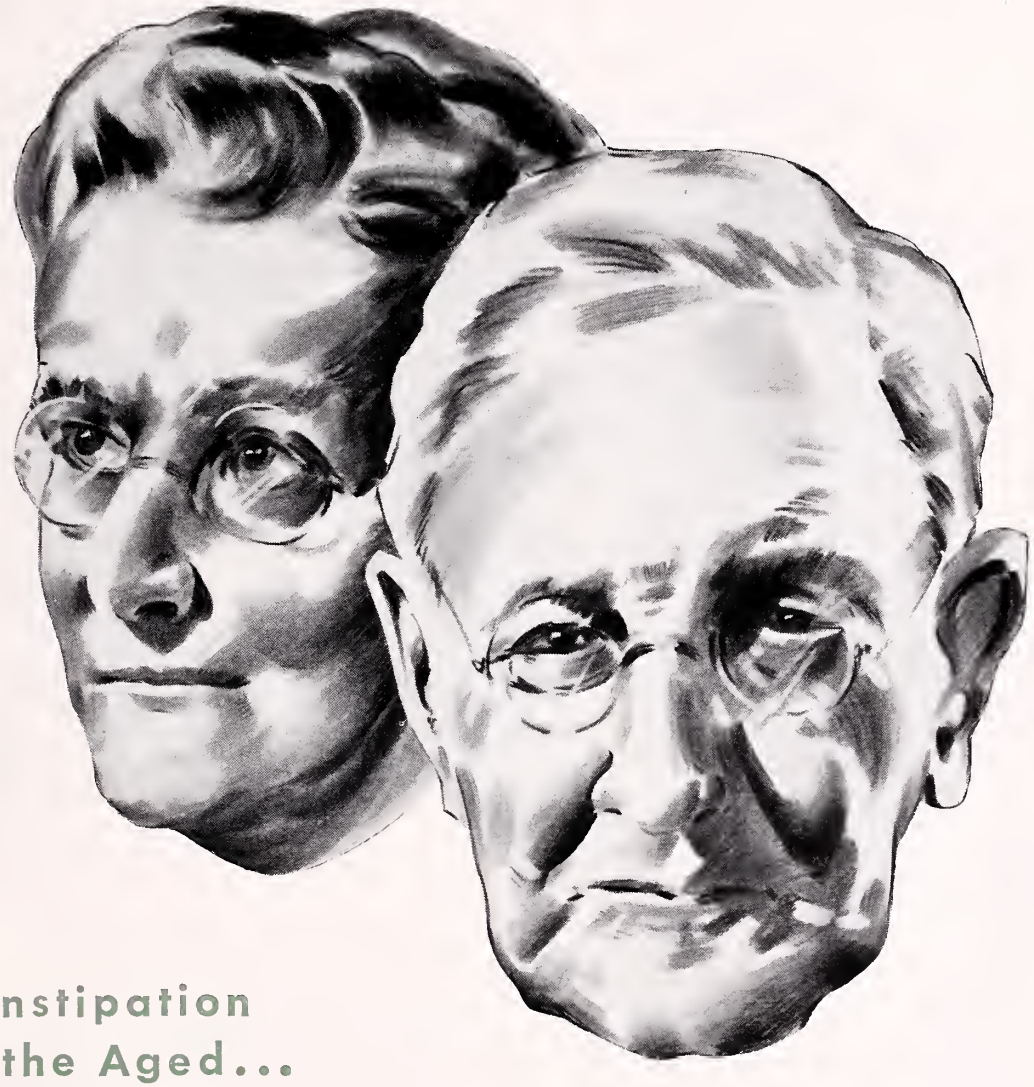
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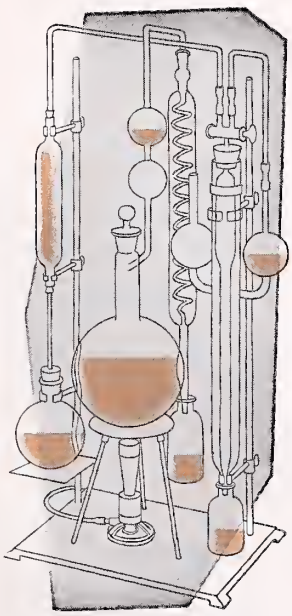
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1. *Withering, W.:* An account of the Foxglove, London, 1785.
2. *Rimmerman, A. B.:* Digilanid and the Therapy of Congestive Heart Disease, Am. J. M. Sc. *209:* 33-41 (Jan.) 1945.

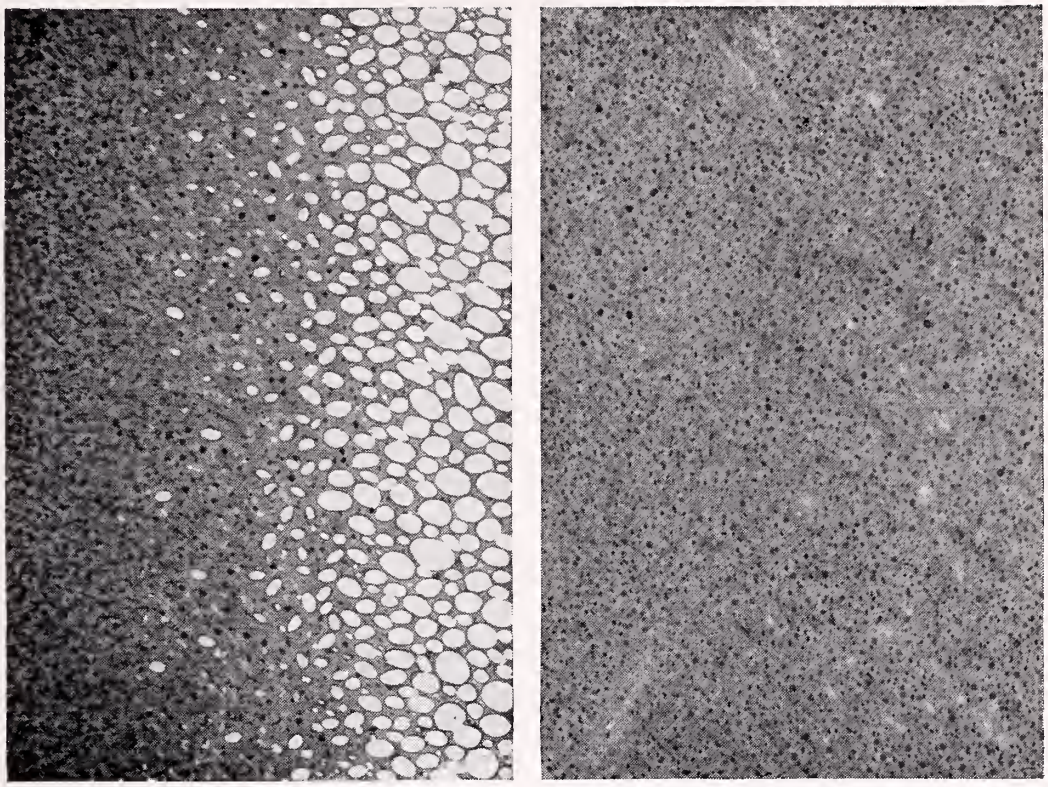
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Casec*—A concentrated (88%) protein supplement highly useful in dietary management of diarrhea and colic. Valuable for increasing the protein content of the formula or diet.

Mead's Powdered Lactic Acid Milk No. 2—Acidified whole milk. Valuable when a milk of exceptional digestibility is indicated, as for malnourished or undernourished infants and in certain digestive disorders.

Mead's Powdered Protein Milk—Powdered lactic acid milk of high protein, low carbohydrate and average fat content. Highly useful in celiac disease and in diarrhea.

Nutramigen*—A nutritionally adequate truly hypoallergenic food—containing a nonantigenic casein hydrolysate combined with carbohydrate, fat, minerals and crystalline B vitamins. Invaluable for infants sensitive to milk or other foods.

*T.M. Reg. U.S. Pat. Off.



The New York Academy of Medicine

DUE IN TWO WEEKS UNLESS RENEWED.
NOT RENEWABLE AFTER 6 WEEKS.

DATE BORROWED	BORROWER
JAN 26 1959	
MAR 2 8 1962	